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                 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
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         SEP 09
 NEWS 4
         OCT 03
                 MATHDI removed from STN
                 CA/CAplus-Canadian Intellectual Property Office (CIPO) added
 NEWS 5
         OCT 04
                  to core patent offices
                 New CAS Information Use Policies Effective October 17, 2005
 NEWS 6
         OCT 13
                 STN(R) AnaVist(TM), Version 1.01, allows the export/download
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         OCT 17
                  of CAplus documents for use in third-party analysis and
                  visualization tools
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                 CA/CAplus - Expanded coverage of German academic research
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 NEWS 14 DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
 NEWS 15 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
 NEWS 16 DEC 14 CA/CAplus to be enhanced with updated IPC codes
 NEWS 17 DEC 16 MARPATprev will be removed from STN on December 31, 2005
 NEWS 18 DEC 21 IPC search and display fields enhanced in CA/CAplus with the
                 IPC reform
 NEWS 19 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2
 NEWS EXPRESS
              DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005.
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               General Internet Information
 NEWS INTER
               Welcome Banner and News Items
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               Direct Dial and Telecommunication Network Access to STN
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FILE 'HOME' ENTERED AT 08:38:28 ON 27 DEC 2005

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:38:36 ON 27 DEC 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 DEC 2005 HIGHEST RN 870675-00-6 DICTIONARY FILE UPDATES: 26 DEC 2005 HIGHEST RN 870675-00-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10659167\Struc 1.str

chain nodes : 15 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 16 17 18 19 21

chain bonds :

5-15 15-16 18-20 20-21

ring bonds :

 $1-2^{-1} \ 1-6 \ 2-3 \ 2-7 \ 3-4 \ 3-10 \ 4-5 \ 5-6 \ 7-8 \ 8-9 \ 9-10 \ 9-11 \ 10-14 \ 11-12 \ 12-13$

13-14 16-17 16-19 17-18 18-19

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 16-17 16-19 17-18 18-19

exact bonds :

5-15 15-16 18-20 20-21

normalized bonds :

9-10 9-11 10-14 11-12 12-13 13-14

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 21:Atom

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR

G1 C,N

Structure attributes must be viewed using STN Express query preparation.

=> 11

SAMPLE SEARCH INITIATED 08:39:02 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

PROJECTED ITERATIONS: 11 TO 389

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> 11 full

FULL SEARCH INITIATED 08:39:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 180 TO ITERATE

100.0% PROCESSED 180 ITERATIONS

13 ANSWERS

SEARCH TIME: 00.00.01

L3 13 SEA SSS FUL L1

=> file caplus medline COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 161.33 161.54

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 08:39:17 ON 27 DEC 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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=> 13

L4 2 L3

=> dup rem 14

PROCESSING COMPLETED FOR L4

L5 2 DUP REM L4 (0 DUPLICATES REMOVED)

=> d ibib abs hitstr

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:252514 CAPLUS

DOCUMENT NUMBER:

140:287395

TITLE:

Preparation of antidepressant azaheterocyclylmethyl

derivs. of heterocycle-fused benzodioxans

INVENTOR(S):

Zhou, Dahui; Stack, Gary Paul

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
WO 2004024730				A1	A1 20040325			WO 2003-US28413					20030911				
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,
		TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
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US	US 2004132714 A1 CA 2498134 AA EP 1537119 A1			A1 20040708				US 2003-659167									
CA				AA 20040325			CA 2003-2498134										
ΕP				A1	A1 20050608			EP 2003-752213						20030911			
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK BR 2003014429 Α 20050823 BR 2003-14429 20030911 NO 2005001769 Α 20050525 NO 2005-1769 20050411 PRIORITY APPLN. INFO.: US 2002-410168P 20020912 US 2003-659167 Α 20030910 WO 2003-US28413 W 20030911

OTHER SOURCE(S): MARPAT 140:287395

GI

$$X = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} 0 & 0 & 0$$

AΒ The title compds. [I; Q = II, III; R1-R3 = H, OH, halo, CN, carboxamido, etc.; X, Y = H, OH, halo, CN, etc.; or X and Y, taken together, form N:CR4CR5:N, N:CR4CR5:CH, N:CR4N:CH, N:CR4O, NHCR7:N, NHCR8:CH; R4, R5 = H, halo, NH2, mono- or dialkylamino, alkyl; R6 = H, alkyl; R7 = H, halo, CF3, etc.; R8 = H, halo, CF3, etc.; Z = O, S, NR9; R9 = H, alkyl; n = 0-2; m = 01-4 (with provisos); p = 1-3 (p+n = 2-3)], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared Thus, reacting 4-bromobenzenesulfonic acid (2R)-8-methyl-2,3dihydro[1,4]dioxino[2,3-f]quinolin-2-ylmethyl ester with 3-azetidin-3-ylmethyl-5-fluoro-1H-indole in the presence of Et3N in DMSO afforded (2S)-2-[3-(5-fluoro-1H-indol-3-ylmethyl)azetidin-1-ylmethyl]-8methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline. The exemplified compds. I were tested for 5-HT transporter affinity, 5-HT1A receptor affinity, and antagonistic activity at 5-HT1A receptors and biol. data were given. The pharmaceutical composition comprising the compound I is claimed.

TT 676125-36-3P 676125-38-5P 676125-42-1P 676125-43-2P 676125-44-3P 676125-56-7P 676125-57-8P 676125-86-3P 676125-91-0P 676125-92-1P 676126-00-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of heterocycle-fused benzodioxans) $\begin{tabular}{ll} \end{tabular}$

676125-36-3 CAPLUS

RN

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-38-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 676125-42-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676125-43-2 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-44-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 676125-43-2 CMF C26 H26 F N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN676125-56-7 CAPLUS

1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

676125-57-8 CAPLUS RN

1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-CN indol-3-yl)methyl]-1-azetidinyl]methyl]-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

•2 HCl

RN 676125-86-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-91-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-92-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-

yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676126-00-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 2

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:550738 CAPLUS

DOCUMENT NUMBER: 141:89093

TITLE: Preparation of azaheterocyclylmethyl derivatives of

heterocycle-fused benzodioxans as antidepressants

INVENTOR(S): Zhou, Dahui; Stack, Gary Paul

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S.

Provisional Ser. No. 410,168.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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20040708
                                                  US 2003-659167
                                                                             20030910
     US 2004132714
                             A1
                                     20040325
                                                  CA 2003-2498134
                                                                             20030911
     CA 2498134
                             AA
                                     20040325
                                                  WO 2003-US28413
                                                                             20030911
     WO 2004024730
                             A1
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              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
              GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
              LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM,
              PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
              TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                    20050608
                                                 EP 2003-752213
                                                                             20030911
                             A1
     EP 1537119
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     BR 2003014429
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                              Α
                                     20050525
                                                  NO 2005-1769
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     NO 2005001769
                                                  US 2002-410168P
                                                                          P
                                                                             20020912
PRIORITY APPLN. INFO.:
                                                  US 2003-659167
                                                                          Α
                                                                             20030910
                                                  WO 2003-US28413
                                                                             20030911
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OTHER SOURCE(S): MARPAT 141:89093

$$Q^{1} =$$

$$Z$$

$$R^{3}$$

$$R^{2}$$

$$R^{2}$$

(azaheterocyclylmethyl) heterocycle-fused benzodioxan derivs. [Q = Q1, Q2; AB R1, R2, R3, X, Y = H, HO, halo, cyano, carboxamido, C2-6 carboalkoxy, CF3, C1-6 alkyl, C1-6 alkoxy, C2-6 alkanoyl, C2-6 alkanoyloxy, amino, mono- or di(C1-6 alkyl)amino, C2-6 alkanamido, C1-6 alkanesulfonyl, C1-6 alkanesulfonamido; or X and Y, taken together, form -N:C(R4)C(R5):N--N:C(R4)C(R6):CH-, -N:C(R4)N:CH-, -N:C(R4)O-, -NHC(R7):N- or -NHC(R8):CH-; R4, R5 = H, halo, amino, mono- or di(C1-6 alkyl)amino, C1-6 alkyl; R8 = H, C1-6 alkyl; R7 = H, halo, CF3, pentafluoroethyl, amino, mono- or di(C1-6 alkyl)amino, C1-6 alkyl; R8 = H, halo, CF3, pentafluoroethyl, C1-6 alkyl; Z = 0, S, or NR9 (R9 = H, C1-6 alkyl); n = an integer 0, 1, or 2; m = aninteger from 1 to 4, provided that $m+n \le 4$ and that when m = n = 2, and Q is Q2 then X and Y are not NH-C(R8):CH-; p = an integer from 1 to 3, provided that p+n = 2 or 3] or pharmaceutically acceptable salts thereof are prepared These compds. inhibit serotonin reuptake and are antagonists of the 5HT1A receptor and are useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as pre-menstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized

Ι

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anxiety disorder, obesity, eating disorders such as anorexia nervosa and
        bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual
        dysfunction and related illnesses. Thus, a solution of (2R)-4-
        bromobenzenesulfonic acid (8-methyl-2,3-dihydro-[1,4]dioxino[2,3-
        f]quinolin-2-yl)methyl ester (0.35 g, 0.80 mmol), 3-[(azetidin-3-
        yl)methyl]-5-fluoro-1H-indole (0.19 g, 0.96 mmol), and Et3N (0.16 mL, 1.2
        mmol) in DMSO (20 mL) was heated at 90° under nitrogen overnight to
        give, after workup and silica gel chromatog., (S)-2-[[3-[(5-Fluoro-1H-
        indol-3-yl)methyl]azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-
        [1,4]dioxino[2,3-f]quinoline (II) as a brown oil which was converted into
        the dihydrochloride. II.2HCl and (S)-1-[2-[1-[(8-Methyl-2,3-dihydro-[1,4]-
        dioxino[2,3-f]quinolin-2-yl)methyl]azetidin-3-yl]ethyl]-1H-indole-6-
        carbonitrile showed an affinity to 5-HT1A serotonin receptor in displacing
        [3H]8-OHDPAT (dipropylaminotetralin) from 5-HT1A serotonin receptor in CHO
        cells with Ki of 2.50 and 1.52 nM, resp.
        676125-36-3P, (S)-2-[[3-[(5-Fluoro-1H-indol-3-yl)methyl]azetidin-1-
IT
        yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
        676125-38-5P, (S)-2-[[3-[(5-Fluoro-1H-indol-3-yl)methyl]azetidin-1-
        yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
        dihydrochloride 676125-42-1P, (S)-2-[[3-(1H-Indol-3-
        ylmethyl)azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-
        f]quinoline 676125-43-2P, (S)-2-[[3-[(5-Fluoro-1-methyl-1H-indol-
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        f]quinoline 676125-56-7P, (S)-8-Methyl-2-[[3-[(5-methyl-1H-indol-
        3-yl) methyl]azetidin-1-yl]methyl]-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
        676125-86-3P, 2-[[3-[(5-Fluoro-1H-indol-3-yl)methyl]azetidin-1-
        yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
        676125-91-0P, 2-[3-[3-[(1H-Indol-3-yl)methyl]azetidin-1-yl]methyl]-
        8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline 676125-92-1P,
        2-[[3-[(5-Fluoro-1-methyl-1H-indol-3-yl)methyl]azetidin-1-yl]methyl]-8-
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        8-Methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]azetidin-1-yl]methyl]-2,3-
        dihydro-[1,4]dioxino[2,3-f]quinoline 716323-03-4P,
        (S)-2-[[3-[(5-Fluoro-1-methyl-1H-indol-3-yl)]] a zetidin-1-yl] methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl] a zetidin-1-yl] methyl]-8-indol-3-yl) methyl] a zetidin-1-yl] methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl] a zetidin-1-yl] methyl]-8-indol-3-yl) methyl] a zetidin-1-yl] methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl]-8-indol-3-yl) methyl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-yl]-1-y
        methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline oxalate
        716323-11-4P, (S)-8-Methyl-2-[[3-[(5-methyl-1H-indol-3-
        yl)methyl]azetidin-1-yl]methyl]-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
        hydrochloride
        RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
        (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
         (Uses)
             (preparation of (azaheterocyclylmethyl)heterocycle-fused benzodioxans having
             affinity to 5-HT1A serotonin receptor as antidepressants)
RN
        676125-36-3 CAPLUS
        1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-
CN
        azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
```

RN 676125-38-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

•2 HCl

RN 676125-42-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676125-43-2 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-56-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-91-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-92-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676126-00-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 716323-03-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676125-43-2 CMF C26 H26 F N3 O2

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 716323-11-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 12.32 173.86 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -1.46 -1.46

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STRUCTURE FILE UPDATES: 26 DEC 2005 HIGHEST RN 870675-00-6 DICTIONARY FILE UPDATES: 26 DEC 2005 HIGHEST RN 870675-00-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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http://www.cas.org/ONLINE/UG/regprops.html

=>

Uploading C:\Program Files\Stnexp\Queries\10659167\Struc 2.str

chain nodes :

15 17

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds : 5-15 15-17

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 9-11 10-14 11-12 12-13

13-14

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9

exact bonds : 5-15 15-17

normalized bonds :

9-10 9-11 10-14 11-12 12-13 13-14

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 17:CLASS

L6 STRUCTURE UPLOADED

=> 16

SAMPLE SEARCH INITIATED 08:42:10 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 7 TO 298

PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L6

=> 16 full

FULL SEARCH INITIATED 08:42:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 139 TO ITERATE

100.0% PROCESSED 139 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L8 0 SEA SSS FUL L6

=> file caplus medline scisearch

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
161.76
335.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION
CA SUBSCRIBER PRICE

0.00
-1.46

FILE 'CAPLUS' ENTERED AT 08:42:59 ON 27 DEC 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 08:42:59 ON 27 DEC 2005

FILE 'SCISEARCH' ENTERED AT 08:42:59 ON 27 DEC 2005 Copyright (c) 2005 The Thomson Corporation

=> zhou

L9 1606 ZHOU

=> stack

L10 48413 STACK

=> zhou and stack

L11 1 ZHOU AND STACK

=> d l11 ibib abs

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:59666 CAPLUS

DOCUMENT NUMBER: 128:109258

TITLE: Superconductivity-induced phonon renormalization in

(Cu,C)Ba2Ca2Cu4Oz superconductor

AUTHOR(S): Hadjiev, V. G.; Cardona, M.; Du, Z. L.; Xue, Y. Y.;

Chu, C. W.

CORPORATE SOURCE: Max-Planck-Institut Festkoerperforschung, Stuttgart,

D-70569, Germany

SOURCE: Physica Status Solidi B: Basic Research (1998),

205(1), R1-R2

CODEN: PSSBBD; ISSN: 0370-1972

PUBLISHER: Akademie Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English

AB The supercond.-induced phonon renormalization effect recently discovered (
Zhou et al. (1997)) for HgBa2Ca3Cu4O10+x (Hg-1234) was now
investigated in another 4 CuO2-layer-containing superconductor
(Cu,C)Ba2Ca3Cu4Oz ((Cu,C)-1234) using Raman spectroscopy. In the
(Cu,C)-1234 samples, a supercond.-induced phonon self-energy effect
similar to that observed in Hg-1234 was found. The only structural features
the 2 classes of superconducting compds. have in common is the

stack of CuO2 layers separated by Ca which in the authors' opinion is an indication for the measurement of an intrinsic property related only to the supercond. in the doped CuO2 planes.

```
=> logoff y
                                                   SINCE FILE
                                                                    TOTAL
COST IN U.S. DOLLARS
                                                        ENTRY
                                                                 SESSION
FULL ESTIMATED COST
                                                        13.26
                                                                  348.88
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
                                                   SINCE FILE
                                                                    TOTAL
                                                                 SESSION
                                                        ENTRY
                                                        -0.73
                                                                    -2.19
CA SUBSCRIBER PRICE
```

STN INTERNATIONAL LOGOFF AT 08:43:35 ON 27 DEC 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSPTAJRK1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                Web Page URLs for STN Seminar Schedule - N. America
NEWS 1
                "Ask CAS" for self-help around the clock
NEWS 2
NEWS 3 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 4
        OCT 03 MATHDI removed from STN
NEWS 5 OCT 04 CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                to core patent offices
NEWS 6 OCT 13 New CAS Information Use Policies Effective October 17, 2005
NEWS 7 OCT 17 STN(R) AnaVist(TM), Version 1.01, allows the export/download
                of CAplus documents for use in third-party analysis and
                visualization tools
NEWS 8 OCT 27 Free KWIC format extended in full-text databases
NEWS 9 OCT 27 DIOGENES content streamlined
NEWS 10 OCT 27 EPFULL enhanced with additional content
NEWS 11 NOV 14 CA/CAplus - Expanded coverage of German academic research
NEWS 12 NOV 30 REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                spectral property data
NEWS 13 DEC 05 CASREACT(R) - Over 10 million reactions available
NEWS 14 DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
NEWS 15 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS 16 DEC 14 CA/CAplus to be enhanced with updated IPC codes
NEWS 17 DEC 16 MARPATprev will be removed from STN on December 31, 2005
NEWS 18 DEC 21 IPC search and display fields enhanced in CA/CAplus with the
                IPC reform
NEWS 19 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2
NEWS EXPRESS DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01,
             CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005.
```

V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT http://download.cas.org/express/v8.0-Discover/

NEWS DCOST

SINCE APPROXIMATELY 20:00 COLUMBUS TIME DECEMBER 29, SOME ONLINE COST DISPLAYS HAVE BEEN SHOWING COSTS IN 2006 PRICES FOR STN COLUMBUS FILES. THIS HAS BEEN CORRECTED. PLEASE BE ASSURED THAT YOU WILL BE BILLED ACCORDING TO 2005 PRICES UNTIL JAN 1. PLEASE CONTACT YOUR LOCAL HELP DESK IF YOU HAVE ANY QUESTIONS. WE APOLOGIZE FOR THE ERROR.

NEWS HOURS

STN Operating Hours Plus Help Desk Availability

NEWS INTER

General Internet Information

NEWS LOGIN

Welcome Banner and News Items

NEWS PHONE

Direct Dial and Telecommunication Network Access to STN

NEWS WWW

CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:42:49 ON 03 JAN 2006

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 0.21 SESSION 0.21

FILE 'REGISTRY' ENTERED AT 10:42:58 ON 03 JAN 2006
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STRUCTURE FILE UPDATES:

2 JAN 2006 HIGHEST RN 870976-29-7

DICTIONARY FILE UPDATES:

2 JAN 2006 HIGHEST RN 870976-29-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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* The CA roles and document type information have been removed from * the IDE default display format and the ED field has been added, * effective March 20, 2005. A new display format, IDERL, is now * available and contains the CA role and document type information.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>

Uploading C:\Program Files\Stnexp\Queries\10659167\Struc 3.str

chain nodes :

11 16

ring nodes :

 $1 \ \bar{2} \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 10 \ 12 \ 13 \ 14 \ 15$

chain bonds :

5-11 11-12 14-16

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 12-13 12-15 13-14 14-15

exact/norm bonds :

1-2 1-6 3-4 4-5 5-6 12-13 12-15 13-14 14-15

exact bonds :

5-11 11-12 14-16

normalized bonds :

2-3 2-7 3-10 7-8 8-9 9-10

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR

$$\begin{array}{c|c} CH_2 & CH_2 \\ \hline \\ CH_2 & CH_2 \\ \hline \\ CH_2 & 1-4 \\ \hline \end{array}$$

G1 C,N

Structure attributes must be viewed using STN Express query preparation.

=> 11

SAMPLE SEARCH INITIATED 10:43:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 90 TO ITERATE

100.0% PROCESSED 90 ITERATIONS 20 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 1231 TO 2369
PROJECTED ANSWERS: 132 TO 668

L2 20 SEA SSS SAM L1

=> 11 full

FULL SEARCH INITIATED 10:43:31 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2212 TO ITERATE

100.0% PROCESSED 2212 ITERATIONS 501 ANSWERS

SEARCH TIME: 00.00.01

L3 501 SEA SSS FUL L1

=> file caplus medline

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 166.94 167.15

FILE 'CAPLUS' ENTERED AT 10:43:43 ON 03 JAN 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE 'MEDLINE' ENTERED AT 10:43:43 ON 03 JAN 2006

=> 13

L4 34 L3

provided by InfoChem.

=> dup rem 13

DUPLICATE IS NOT AVAILABLE IN 'REGISTRY'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 10.87 178.02

FILE 'REGISTRY' ENTERED AT 10:43:50 ON 03 JAN 2006

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STRUCTURE FILE UPDATES: 2 JAN 2006 HIGHEST RN 870976-29-7 DICTIONARY FILE UPDATES: 2 JAN 2006 HIGHEST RN 870976-29-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
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* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,
effective March 20, 2005. A new display format, IDERL, is now
 available and contains the CA role and document type information. *
Structure search iteration limits have been increased. See HELP SLIMITS
for details.
```

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html PROCESSING COMPLETED FOR L3 501 DUP REM L3 (0 DUPLICATES REMOVED)

=> file caplus medline COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.44 178.46

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 10:43:57 ON 03 JAN 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 10:43:57 ON 03 JAN 2006

=> dup rem 14 PROCESSING COMPLETED FOR L4 33 DUP REM L4 (1 DUPLICATE REMOVED)

=> d scan

33 ANSWERS CAPLUS COPYRIGHT 2006 ACS on STN 1.6

IC C07D401-12; C07D405-14; C07D413-12; A61K031-445; C07D413-14

28-10 (Heterocyclic Compounds (More Than One Hetero Atom))

Substituted 2,5-diamino-1,4-diazole derivatives with antihypertensive activity

heterocyclylaminoalkylpiperidine antihypertensive prepn; ST aralkylpiperidinoalkylaminodiazole; piperidinoalkylaminodiazole

Antihypertensives IT

(heterocyclylaminoalkylpiperidines)

IT 89483-73-8 **89483-76-1 90618-24-9** 90618-25-0

RL: RCT (Reactant); RACT (Reactant or reagent) (cyclization of, with hydrazines and hydroxylamines)

IT 60-34-4

RL: RCT (Reactant); RACT (Reactant or reagent) (cyclization of, with methylisothioureidyl alkylpiperidine derivs.)

IT 90618-34-1 90618-35-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclization of, with methylisothioureidylalkylpiperidine derivs.)

IT 89483-82-9P 90618-29-4P 90618-30-7P

```
90618-37-4P
                                90618-38-5P
                                              90618-39-6P
     90618-31-8P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and cyclization of, with hydrazine)
IT
     89483-87-4P
                   90618-27-2P
                                90618-28-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and cyclization of, with hydrazines)
IT
     89483-92-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and cyclization of, with hydroxyl amine)
                   90618-33-0P
TT
     90618-32-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and cyclization of, with hydroxylamine)
                   90618-43-2P 90618-44-3P 90618-45-4P
                                                              90618-46-5P
ΙT
     90618-42-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and hydrolysis of)
IT
     90618-40-9P
                  90618-41-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reduction of)
IT
     10191-60-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with aminoalkylpiperidines)
                 89483-91-0
IT
     89483-81-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with cyaniminodithiocarbonate)
IT
     89483-86-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with cyanoiminodithiocarbanate)
IT
     90618-36-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with cyanoiminodithiocarbonate)
IT
     89483-31-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with hydrazine)
                           5470-11-1
                                       90618-26-1
IT
     302-01-2, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with methylisothioureidylakylpiperidines)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0
=> d ibib abs hitstr 25-33
    ANSWER 25 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN
                         1986:424269 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         105:24269
                         Antihypertensive substituted diaminodiazoles and
TITLE:
                         -triazoles
                         Cornu, Pierre Jean; Perrin, Claude; Dumaitre, Bernard;
INVENTOR (S):
                         Streichenberger, Gilles
PATENT ASSIGNEE(S):
                         Fr.
                         U.S., 12 pp.
CODEN: USXXAM
SOURCE:
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

19840413 19860211 US 1984-599784 US 4569933 Α

PRIORITY APPLN. INFO.:

GI

US 1984-599784

19840413

0=

$$\mathbb{R}^{2}\mathbb{N}$$
 \mathbb{N} \mathbb{Q}^{1} \mathbb{N} $\mathbb{$

The title compds. [I; R = pyridinyl, oxazinyl, pyrazinyl, (un)substituted AΒ Ph, tetrahydronaphthyl, benzodioxanyl, benzodioxenyl, quinolinyl, thiachromanyl, indolyl, bicyclic heteroaryl; R1 = Q, Q1; X = N R2, O; R2 = H, alkyl; Z = (un) substituted alkylene, n = 0-2] were prepared as antihypertensives. Thus, 4-(acetylamino)piperidine was alkylated with 3-(2-bromoethyl) indole to give (indolylethyl) piperidine II (R3 = Ac). This was deacetylated and condensed with MeSC(:NCN)OMe to give II [R3 = C(:NCN)SMe], which was cyclocondensed with N2H4 to give II (R3 = 2-amino-1,3,5-triazol-5-yl). In rats 12-5 mg I/kg orally significantly reduced blood pressure.

II

IT 89483-81-8

RL: RCT (Reactant); RACT (Reactant or reagent) (condensation of, with (cyanoimino) dithiocarbonate)

89483-81-8 CAPLUS DM

4-Piperidinemethanamine, 1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-CN yl)methyl] - (9CI) (CA INDEX NAME)

IT 89483-76-1

> RL: RCT (Reactant); RACT (Reactant or reagent) (cyclocondensation of, with hydrazine or hydroxylamine)

89483-76-1 CAPLUS RN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME) CN

$$CH_2-N=C-NH-CN$$

$$CH_2-N=C-NH-CN$$

IT 89483-82-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclocondensation of, with hydrazine or hydroxylamine)

RN 89483-82-9 CAPLUS

CN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

$$CH_2-N=CH_2-NH-CN$$
Me

IT 90618-24-9P 90618-29-4P 90618-30-7P 90618-31-8P 90618-34-1P 90618-35-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antihypertensive)

RN 90618-24-9 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 90618-29-4 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 90618-30-7 CAPLUS

CN 1,2,4-Oxadiazole-3,5-diamine, N3-[[1-[(2,3-dihydro-6-methyl-1,4-

benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
CH_2-NH & N-O \\
N-O & N+O
\end{array}$$

RN 90618-31-8 CAPLUS

CN 1,2,4-Oxadiazole-3,5-diamine, N3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 90618-34-1 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-methyl- (9CI) (CA INDEX NAME)

RN 90618-35-2 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N5-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

L6 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:114567 CAPLUS

DOCUMENT NUMBER: 110:114567

TITLE: Preparation of (4-Piperidinylmethyl and -hetero)purines as antiallergic agents

INVENTOR(S): Janssens, Frans Eduard; Diels, Gaston Stanislas

Marcella

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: Eur. Pat. Appl., 102 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

Page 29
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT NO.			KINI)	DATE		A	PF	PLICATION NO.		DATE
	206415			A2			1230	E	P	1986-201048	-	19860617
EP	206415			A3		19880	316					
	206415											
	R: AT,	BE,	CH,	DE,	FR					J, NL, SE		
CA	1267889			A1						1986-511113		19860609
SU	1581221			A 3					U	1986-4027617		19860610
AT	85055 62000487			E		19930	215	A	T	1986-201048		19860617
JP	62000487									1986-143155		19860620
ES	556381			A1					S	1986-556381		19860620
DK	8602952			Α		19861	1225	D.	K	1986-2952		19860623
	169073					19940						
FI	8602655 85704 85704			Α		19861		F	Ι	1986-2655		19860623
FI	85704			В		19920						
FI	85704			С		19920						
ИО	8602504 163956			Α		19861		N	0	1986-2504		19860623
ИО	163956			В		19900						
ИО	163956			С		19900						
AU	8659191			A1		19870	108	A	U	1986-59191		19860623
AU	588890			B2		19890	928					
HU	42095					19870	629	H	U	1986-2631		19860623
HU	199143			В		19900						
ZA	8604677			Α		19880			Α	1986-4677		19860623
${ t IL}$	79193					19901				1986-79193		19860623
US	5041448			Α		19910	820	υ	S	1989-323250		19890309
US	5258380			Α		1993	102			1991-719273		19910621
PRIORITY	APPLN.	INFO.	:							1985-15934		
								U	S	1986-858339	B1	19860501
								E	P	1986-201048	Α	19860617
								U	S	1989-323250	A3	19890309
a T												

GI

The title compds. I [A1:A2:A3:A4 = N:CHN:CH, CH:NCH:N, wherein 1 or 2 H may each be replaced by halo, C1-6 alkyl, C1-6 alkoxy, F3C, H0; R1 = H, C1-10 alkyl, C3-6 cycloalkyl, etc.; R2 = H, C1-6 alkyl; B = H2C, O, S, SO, SO2, NR, R = H, C1-6 alkyl, C3-6 cycloalkyl, etc.; L = (un)substituted methoxyalkyl, -methylthioalkyl, -alkoxycarbonyl, alkylthio, (un)substituted alkyl, optionally with heteroatom interrupters, (un)substituted N-heterocyclyl, (un)substituted pyrimidinyloxyalkyl, -thioalkyl, etc., with restrictions] and their salts, useful as antiallergic agents, were prepared 2-Ethenylpyridine, 9-[(4-fluorophenyl)methyl]-N-(4-piperidinyl)-9H-purin-8-amine and BuOH were refluxed overnight to give 9-[(4-fluorophenyl)methyl]-N-[1-[2-(2-pyridinyl)ethyl]-4-piperidinyl]-9H-purin-8-amine (II). In tests in rats against compound 48/80, a potent histamine releasing agent, at 0.5 mg/kg, the ED50 of II was 0.01 mg/kg.

IT 116062-73-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as antiallergic agent)

RN 116062-73-8 CAPLUS

CN 6H-Purin-6-one, 8-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-9-[(4-fluorophenyl)methyl]-1,9-dihydro- (9CI) (CA INDEX NAME)

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L6 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1987:67298 CAPLUS

DOCUMENT NUMBER:

106:67298

TITLE:

Preparation of substituted N-[(4-piperidinyl)alkyl] bicyclic condensed oxazol- and thiazolamines and

pharmaceuticals containing them.

INVENTOR (S):

Janssens, Frans Eduard; Van Offenwert, Theophilus Theresia; Stokbroekx, Raymond Antoine; Boar, Bernard

Robin

PATENT ASSIGNEE(S):

Janssen Pharmaceutica N. V., Belg.

SOURCE:

Eur. Pat. Appl., 36 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DAT	E APPLICATION NO.	DATE		
EP 199400 EP 199400	A3 198	61029 EP 1986-200552 70819	19860402		
EP 199400		00926 , IT, LI, LU, NL, SE			
' '			10060007		
US 4689330		70825 US 1986-833710	19860227		
AT 56972	E 199	01015 AT 1986-200552	19860402		
CA 1271474	A1 199	00710 CA 1986-505892	19860404		
JP 62129282	A2 198	70611 JP 1986-78429	19860407		
JP 08000824	B4 199	60110			
CN 86102349	A 198	61119 CN 1986-102349	19860408		
CN 1019393	B 199	21209			
ES 553936	A1 198	70101 ES 1986-553936	19860411		
DK 8601694	A 198	61016 DK 1986-1694	19860414		
DK 165183	B 199	21019			
DK 165183	C 199	30315			
FI 8601562	A 198	61016 FI 1986-1562	19860414		
FI 82047	B 199	00928			
FI 82047	C 199	10110			
NO 8601442	A 198	61016 NO 1986-1442	19860414		
NO 163818	B 199	00417			
NO 163818	C 199	00725			

HU	40633		A2	19870128	HU	1986-1560		19860414
HU	196393		В	19881128				
ZA	8602776		A	19871125	ZA	1986-2776		19860414
SU	1524809		A3	19891123	SU	1986-4027244		19860414
IL	78487		A1	19891215	IL	1986-78487		19860414
AU	8656135		A1	19861023	ΑU	1986-56135		19860415
AU	582642		B2	19890406				
US	4749702		A	19880607	US	1987-45936		19870623
US	4826848		Α	19890502	US	1988-156379		19880216
PRIORITY	APPLN.	INFO.:			US	1985-723400	Α	19850415
					US	1986-833710	A3	19860227
					EP	1986-200552	Α	19860402
					US	1987-45936	A3	19870623

OTHER SOURCE(S): CASREACT 106:67298

GI For diagram(s), see printed CA Issue.

AB The title compds. [I; R = H, C1-6 alkyl, C1-6 alkoxy, OH; R1 = H, C1-6 alkyl, C1-6 alkanoyl, aroyl, C1-6 alkoxycarbonyl, (un)substituted aralkyl, heteroarylalkyl; R2 = Q, R3R4C6H3OZ; R3, R4 = H, OH, C1-6 alkyl, C1-6 alkoxy, phenylalkoxy, halo, CF3; R5 = H, C1-6 alkyl; X = O, S; X1 = CH2, O; Z = C1-4 alkylene; A = (un)substituted, fused benzene, pyridine, or pyrimidine ring] were prepared as anti-Parkinson or enterokinetic agents (no data) or antidepressants. 1-Acetyl-4-piperidinemethanamine was condensed with CS2 in presence of dicyclohexylcarbodiimide to give 1-acetyl-4-(isothiocyanatomethyl)piperidine, which was condensed with PhNH2 to give a thiourea derivative The latter was cyclized and deacetylated to give N-(4-piperidinylmethyl)-2-benzothiazolamine-2HBr. This was N-alkylated with (R)-(-)-2,3-dihydro-1,4-benzodioxin-2-ylmethyl tosylate to give benzodioxinmethanamine (S)-(-)-II (III). As an antidepressant III reversed xylazine-induced loss of righting reflex in rats with an ED50 of 0.11 mg/kg. Capsules were prepared containing active ingredient 20, Na lauryl sulfate 6, starch 56, lactose 56, colloidal SiO2 0.8, and Mg stearate 1.2 g per 1000.

IT 106245-11-8P 106245-12-9P 106245-13-0P 106249-94-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of)

RN 106245-11-8 CAPLUS

CN Acetamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106245-12-9 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Page 32 RN 106245-13-0 CAPLUS Thiourea, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-CN piperidinyl]methyl]-N'-(4-methoxyphenyl)- (9CI) (CA INDEX NAME) **OMe** CH2-NH-C-NH 106249-94-9 CAPLUS RN4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-CN [(4-fluorophenyl)methyl]- (9CI) (CA INDEX NAME) CH2-NH-CH2 104383-18-8P 104383-19-9P 104383-20-2P IT 106244-01-3P 106244-03-5P 106244-04-6P 106244-05-7P 106244-06-8P 106244-08-0P 106244-09-1P 106244-14-8P 106244-15-9P 106244-16-0P 106244-17-1P 106244-18-2P 106244-19-3P 106244-20-6P 106244-24-0P 106244-25-1P 106244-26-2P 106244-27-3P 106244-30-8P 106244-31-9P 106244-43-3P 106244-44-4P 106244-49-9P 106244-50-2P 106244-51-3P 106244-58-0P 106244-60-4P 106244-61-5P 106244-62-6P 106244-66-0P 106244-67-1P 106244-68-2P 106244-69-3P 106244-70-6P 106244-71-7P 106249-92-7P 106249-93-8P 106257-40-3P 106257-41-4P 106257-42-5P 106257-44-7P 106294-99-9P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

RN104383-18-8 CAPLUS 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-CNpiperidinyl]methyl] - (9CI) (CA INDEX NAME)

(preparation of, as drug)

RN 104383-19-9 CAPLUS CN 2-Benzothiazolamine, N-[[1-[[(2S)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 104383-20-2 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[[(2R)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106244-01-3 CAPLUS

CN Thiazolo[5,4-b]pyridin-2-amine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106244-03-5 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106244-04-6 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106244-05-7 CAPLUS

CN Thiazolo[5,4-b]pyridin-2-amine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106244-06-8 CAPLUS

CN Thiazolo[5,4-b]pyridin-2-amine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106244-08-0 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,7-dimethoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{NH- CH}_2 \\ \hline & \text{OMe} \\ \end{array}$$

RN 106244-09-1 CAPLUS

CN 2-Benzothiazolamine, 6-chloro-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106244-14-8 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-fluoro- (9CI) (CA INDEX NAME)

RN 106244-15-9 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 106244-16-0 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-methyl- (9CI) (CA INDEX NAME)

Me
$$NH-CH_2$$
 $N-CH_2$
 O

RN 106244-17-1 CAPLUS

CN 2-Benzothiazolamine, 4-chloro-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106244-18-2 CAPLUS

CN 2-Benzothiazolamine, 4-chloro-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, dihydrobromide (9CI) (CA INDEX NAME)

●2 HBr

RN 106244-19-3 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 106244-20-6 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methyl-, dihydrobromide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ \hline \\ N \\ \hline \\ NH-CH_2 \\ \hline \\ N-CH_2 \\ \hline \\ O \\ \end{array}$$

•2 HBr

RN 106244-24-0 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,6,7-trimethoxy- (9CI) (CA INDEX NAME)

RN 106244-25-1 CAPLUS

CN 1,3-Dioxolo[4,5-f]benzothiazol-6-amine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106244-26-2 CAPLUS

CN [1,4]Dioxino[2,3-f]benzothiazol-2-amine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6,7-dihydro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N & NH-CH_2 \\
\hline
0 & N-CH_2
\end{array}$$

RN 106244-27-3 CAPLUS

CN 2-Benzothiazolamine, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 106244-30-8 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-7-methoxy- (9CI) (CA INDEX NAME)

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,7-dimethoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106244-43-3 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N-(phenylmethyl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 106244-42-2 CMF C29 H31 N3 O2 S

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 106244-44-4 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

•2 HCl

RN 106244-49-9 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,6,7-trimethoxy-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106244-50-2 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,6,7-trimethoxy-, dihydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

•2 HCl

RN 106244-51-3 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,6,7-trimethoxy-, dihydrochloride, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 106244-58-0 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-2-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ & \text{N} \end{array}$$

RN 106244-60-4 CAPLUS

CN 6-Benzothiazolol, 2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & NH-CH_2 \\ \hline \\ N & CH_2 \\ \hline \end{array}$$

RN 106244-61-5 CAPLUS

CN Thiazolo[4,5-c]pyridin-2-amine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106244-62-6 CAPLUS

CN Thiazolo[5,4-d]pyrimidine-2,7-diamine, N2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106244-66-0 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N-[(4-fluorophenyl)methyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 106244-65-9 CMF C29 H30 F N3 O2 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 106244-67-1 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 106244-68-2 CAPLUS

CN Benzamide, N-2-benzothiazolyl-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-(trifluoromethyl)- (9CI) (CA INDEX

NAME)

$$CF_3$$
 $C=0$
 $N-CH_2$
 $N-CH_2$

RN 106244-69-3 CAPLUS

CN Benzamide, N-2-benzothiazolyl-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3,4-dimethoxy- (9CI) (CA INDEX NAME)

RN 106244-70-6 CAPLUS

CN 2-Thiazolecarboxamide, N-2-benzothiazolyl-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 106244-71-7 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-methoxy- (9CI) (CA INDEX NAME)

RN 106249-92-7 CAPLUS

CN 2-Furancarboxamide, N-2-benzothiazolyl-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 106249-93-8 CAPLUS

CN Benzamide, N-2-benzothiazolyl-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 106257-40-3 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,6,7-trimethoxy-, (2E)-2-butenedioate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 106244-24-0 CMF C25 H31 N3 O5 S

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 106257-41-4 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,7-dimethoxy-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106257-42-5 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5,6,7-trimethoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 106257-44-7 CAPLUS

CN 6-Benzothiazolol, 2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RN 106294-99-9 CAPLUS

CN 2-Furancarboxamide, N-2-benzothiazolyl-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

IT 89483-75-0

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reductive alkylation of, with fluorobenzaldehyde)

RN 89483-75-0 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

L6 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:546012 CAPLUS

DOCUMENT NUMBER: 105:146012

TITLE: In vivo pharmacological activity of R 47 243 in rat:

a comparison with putative $\alpha 2$ -adrenoceptor

antagonists

AUTHOR(S): Colpaert, Francis C.; Raeymaekers, Leen

CORPORATE SOURCE: Dep. Psychopharmacol., Janssen Pharm. Res. Lab.,

Beerse, B-2340, Belg.

SOURCE: Drug Development Research (1986), 8(1-4), 361-71

CODEN: DDREDK; ISSN: 0272-4391

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB The effects of the racemate R 47 243 (I) [104383-18-8] and its (-)i [104383-19-9] and (+) - [104383-20-2] isomers as well as those of the putative $\alpha 2$ -antagonists yohimbine [146-48-5], piperoxan [59-39-2], CGS 7525 A [71576-41-5], and idazoxan [79944-58-4] were studied after oral and(or) s.c. administration to rats. The expts. determined the antagonism produced by these compds. of the loss of the righting reflex (LRR) and of the exophthalmia (EXO) induced by i.p. injection of xylazine. Antagonism of LRR constitutes an in vivo measure of drug antagonist effects at central nervous system receptors that mediate behavioral depression produced by putative $\alpha 2$ -agonists; antagonism of EXO offers an in vivo measure of $\alpha 1$ -antagonist activity. More so than idazoxan or any of the other putative $\alpha 2$ -antagonists tested, R 47 243 appeared to be a potent, long acting, and specific antagonist; it also acted as a full antagonist rather than as a partial agonist and showed excellent oral absorption. The (-)-isomer had activity similar to that of the racemate, whereas the (+)-isomer was less potent.

IT 104383-18-8 104383-19-9 104383-20-2
RL: BIOL (Biological study)
(α2-sympatholytic activity of)

RN 104383-18-8 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 104383-19-9 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[[(2S)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 104383-20-2 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[[(2R)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1986:68861 CAPLUS

DOCUMENT NUMBER:

104:68861

TITLE:

(Piperidinylmethyl) - and (piperidinyloxy)benzimidazole

s and -imidazopyridines

INVENTOR (S):

Janssens, Frans Eduard; Kennis, Ludo Edmond Josephine; Hens, Jozef Francis; Torremans, Joseph Leo G.; Diels,

Gaston Stanislas M.

PATENT ASSIGNEE(S):

Janssen Pharmaceutica N. V., Belg.

SOURCE:

Eur. Pat. Appl., 140 pp.

•

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
EP 151826		19850821	EP 1984-201851	-	19841213	
EP 151826	B1	19930331				
R: AT, BE, CH,	DE, FR	, GB, IT,	LI, LU, NL, SE			
AT 87626	E	19930415	AT 1984-201851		19841213	
ES 539281	Al	19870616	ES 1984-539281		19841231	
AU 8537364	Al	19850912	AU 1985-37364		19850107	
AU 573673	B2	19880616				
CA 1259609	A1	19890919	CA 1985-471589		19850107	
DK 8500089	Α	19850710	DK 1985-89		19850108	
FI 8500079	Α	19850710	FI 1985-79		19850108	
FI 83867	В	19910531				
FI 83867	С	19910910				
NO 8500085	A	19850710	NO 1985-85		19850108	
NO 160849	В	19890227				
NO 160849	C	19890607				
JP 60185777	A2	19850921	JP 1985-479		19850108	
JP 07068240	B4	19950726				
HU 36471	A2	19850930	HU 1985-61		19850108	
HU 200338	В	19900528				
ZA 8500187	Α	19860827	ZA 1985-187		19850108	
RO 90622	B3	19861210	RO 1985-117252		19850108	
SU 1396964	A3	19880515	SU 1985-3836858		19850108	
IL 74018	A1	19880831	IL 1985-74018		19850108	
PL 145710	B1	19881031	PL 1985-251488		19850109	
ORITY APPLN. INFO.:			US 1984-569369	A	19840109	
			US 1984-671135	Α	19841113	
			EP 1984-201851	A	19841213	

The title compds. I (Z-Z3 = CH, or one of Z-Z3 is N and the remainder are CH; Z4 = CH2, O, S, SO, SO2; R = alkyl, aryl-, heteroaryl-, acyl-hydroxy-, aryloxy, heteroaryloxy-, alkoxy-, arylthio-, carbonyl-, carboalkoxy-, cyano-, amino-, ureido-, thioureido-, or guanidinoalkyl, cycloalkyl, alkenyl, arylalkenyl; R1 = H, alkyl; R2 = H, alkyl, cycloalkyl, aryl, heteroaryl, aryl- or heteroarylalkyl), which were prepared, exhibited antihistaminic activity. Thus, a mixture of 2-(4-MeC6H4CH2NH)C6H4NH2 and Et 1-benzyl-4-piperidineacetimidate hydrochloride in MeOH was refluxed and NH3 was added to give benzimidazole

IT 99953-86-3P 99953-90-9P 99953-94-3P 99953-96-5P 99953-98-7P 99963-45-8P RL: SPN (Synthetic preparation): PREP (Prepa

RN 99953-86-3 CAPLUS

CN 1H-Benzimidazole, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-(phenylmethyl)-, ethanedioate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 99953-85-2 CMF C29 H31 N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 99953-90-9 CAPLUS

CN 1H-Benzimidazole, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-[(4-fluorophenyl)methyl]-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 99953-89-6 CMF C29 H30 F N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 99953-94-3 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-(2-thienylmethyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 99953-93-2 CMF C26 H28 N4 O2 S

$$CH_2$$
 N
 CH_2
 N
 CH_2
 O
 O
 O

```
Page 50
     CM
          2
     CRN
         144-62-7
          C2 H2 O4
     CMF
HO- C- C- OH
     99953-96-5 CAPLUS
RN
     1H-Benzimidazole, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-
     piperidinyl]methyl]-1-[(4-methylphenyl)methyl]-, (2E)-2-butenedioate (2:3)
     (9CI) (CA INDEX NAME)
     CM
     CRN
          99953-95-4
     CMF C30 H33 N3 O2
              CH<sub>2</sub>
        Me
     CM
          2
     CRN 110-17-8
     CMF C4 H4 O4
```

Double bond geometry as shown.

CMF C27 H29 N5 O2

RN 99953-98-7 CAPLUS
CN 3H-Imidazo[4,5-b]pyridine, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-4-piperidinyl]methyl]-3-(2-pyridinylmethyl)-, ethanedioate (2:5) (9CI) (CA INDEX NAME)

CM 1
CRN 99953-97-6

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 99963-45-8 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-[(4-fluorophenyl)methyl]-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 99963-44-7 CMF C28 H29 F N4 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

L6 ANSWER 30 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:423483 CAPLUS

DOCUMENT NUMBER: 101:23483

TITLE: Substituted 2,5-diamino-1,4-diazole derivatives with

antihypertensive activity

INVENTOR(S): Cornu, François; Perrin, Claude; Dumaitre, Bernard;

Streichenberger, Gilles

PATENT ASSIGNEE(S): Bouchara, Emile, Fr. SOURCE: Fr. Demande, 32 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
FR 2530632	A1 1984012	7 FR 1982-13010	· 19820726
FR 2530632	B3 1985042	6	
WO 8400546	A1 1984021	6 WO 1983-FR158	19830726
W: DK, JP, US			
RW: AT, BE, CF,	CG, CH, CM, DE	, FR, GA, GB, LU, MR, NL	, SE, SN, TD, TG
ES 524439	A1 1984041	6 ES 1983-524439	19830726
EP 114850	A1 1984080	8 EP 1983-902270	19830726
EP 114850	B1 1988062	9	
R: AT, BE, CH,	DE, FR, GB, LI	, LU, NL, SE	
JP 59501458	T2 1984081	6 JP 1983-502474	19830726
AT 35412	E 1988071	5 AT 1983-902270	19830726
PRIORITY APPLN. INFO.:		FR 1982-13010	A 19820726
		EP 1983-902270	A 19830726
		WO 1983-FR158	W 19830726

OTHER SOURCE(S): CASREACT 101:23483

GI

$$RX (CH_2)_{mN}$$
 $CH_2)_{nNHR^2}$ I CH_2NHR^2

AB Heterocyclylalkylpiperidines I [X = CH2, CO, CHOH; R = aryl, heteroaryl; R1 = 3-amino-1,2,4-triazol-5-yl, 5-amino-1,2,4-triazol-3yl, 5-amino-1,2,4-oxadiazol-3-yl; m, n =0-2] were prepared II [R2 = C(SMe):NCN] cyclized with N2H4 to give II (R2 = 3-amino-1,2,4-triazol-5-yl).

IT 89483-76-1 90618-24-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclization of, with hydrazines and hydroxylamines)

RN 89483-76-1 CAPLUS

CN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

$$CH_2 - N = C - NH - CN$$

$$CH_2 - N = C - NH - CN$$

RN 90618-24-9 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-NH & \begin{array}{c} H \\ N \\ N-N \end{array} \end{array}$$

IT 90618-34-1 90618-35-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclization of, with methylisothioureidylalkylpiperidine derivs.)

RN 90618-34-1 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & \\ \hline \\ O & \\ CH_2 - N \\ \hline \\ N \end{array} \begin{array}{c} N & \\ N \\ \hline \\ NH_2 \\ \end{array}$$

RN 90618-35-2 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N5-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-methyl- (9CI) (CA INDEX NAME)

IT 89483-82-9P 90618-29-4P 90618-30-7P

90618-31-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of, with hydrazine)

RN 89483-82-9 CAPLUS

CN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

SMe
$$CH_2-N=C-NH-CN$$

$$CH_2-N=C-NH-CN$$

$$CH_2-N=C-NH-CN$$

RN 90618-29-4 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 90618-30-7 CAPLUS

CN 1,2,4-Oxadiazole-3,5-diamine, N3-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
CH_2-NH & NH_2\\
N-O & NH_2
\end{array}$$

RN 90618-31-8 CAPLUS

CN 1,2,4-Oxadiazole-3,5-diamine, N3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & \\ \hline \\ O & CH_2 - N \\ \hline \end{array}$$

$$\begin{array}{c|c} CH_2 - NH - \\ N - O \\ \end{array}$$

$$\begin{array}{c|c} NH_2 \\ \hline \end{array}$$

IT 89483-81-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with cyaniminodithiocarbonate)

RN 89483-81-8 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2-\text{NH}_2 \\ \text{Me} \end{array}$$

L6 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:156506 CAPLUS

DOCUMENT NUMBER: 100:156506

TITLE: 4-(Carbamoylguanidino) - and -

[(carbamoylguanidino)methyl]piperidines

INVENTOR(S): Cornu, Pierre Jean; Perrin, Claude; Dumaitre, Bernard;

Streichenberger, Gilles

PATENT ASSIGNEE(S): Fr.

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					DATE		AP	PLICATION NO.		DATE		
WO	8303829			A1		19831	1110	WO	1983-FR74		19830421		
	W: FI,	•	•	•									
	2525600					19831		FR	1982-6832		19820421		
	2525600												
ES	521720			A1		19840	201	ES	1983-521720		19830421		
JP	59500672			T2		19840	419	JP	1983-501332		19830421		
EP	106860			A1		19840	502	EP	1983-901206		19830421		
EP	106860			B1		19880	120						
	R: AT,	BE,	CH,	DE,	FR	, GB,	LI,	LU, N	L, SE				
HU	33480			0		19841	128	HU	1983-2237		19830421		
HU	194875			В		19880	328						
CA	1207768			A1		19860	715	CA	1983-426434		19830421		
AT	32073			E		19880	215	AT	1983-901206		19830421		
NO	8304705			Α		19831	220	NO	1983-4705		19831220		
NO	161316			В		19890)424						
NO	161316			C		19890	802						
FI	8304704			Α		19831	221	FI	1983-4704		19831221		
PRIORIT	Y APPLN.	INFO	. :					FR	1982-6832	Α	19820421		
								EP	1983-901206	Α	19830421		
								WO	1983-FR74	W	19830421		

OTHER SOURCE(S): CASREACT 100:156506

GΙ

R1
O
Z-Z1-(CH₂)
$$_{n}$$
N
(CH₂) $_{m}$ NHC (= NCONH₂) NR²R³
I

R1
O
Z-Z1-(CH₂) $_{n}$ N
(CH₂) $_{m}$ NHC (= NCN) NR²R³
II

AB Title compds. I [R = R1 are H, halo, alkyl, alkoxy, CF3, NO2, NH2, or RR1 = alkylenedioxy; one of Z and Z1 is a direct bond or CH2 and the other is CH(OH) or CO; n and m are 0, 1; R2 = H, alkyl, cycloalkyl, aralkyl, alkenyl, acyl; R3 = alkyl, cycloalkyl, aralkyl, alkenyl] were prepared by hydration of the resp. nitriles II; I are useful as antihypertensives and sedatives (no data). II (R = R1 = R2 = H, Z = CH2, Z1 = direct bond, n = m = 0, R3 = Me) was treated with H2SO4 in EtOH to give the corresponding I.

IT 89483-53-4 89483-54-5 89483-56-7 89483-58-9 89483-60-3 89483-61-4 89483-62-5 RL: RCT (Reactant); RACT (Reactant or reagent)
 (hydration of)

RN 89483-53-4 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NHMe} \\ \text{CH}_2 - \text{N} \end{array} \begin{array}{c} \text{NHMe} \\ \text{C-NH-CN} \end{array}$$

RN 89483-54-5 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-(1,2,2-trimethylpropyl)- (9CI) (CA INDEX NAME)

RN 89483-56-7 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-2-propenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH-CN} \\ & \text{CH}_2 - \text{N} & \text{CH}_2 - \text{CH} & \text{CH}_2 - \text{CH} & \text{CH}_2 \\ \hline \\ & \text{CH}_2 - \text{N} & \text{CH}_2 - \text{CH} & \text{CH}_2 - \text{CH} & \text{CH}_2 \\ \hline \end{array}$$

RN 89483-58-9 CAPLUS

CN Guanidine, N-cyano-N'-cyclopropyl-N''-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-N & CH_2-N \\ \hline \end{array}$$

RN 89483-60-3 CAPLUS

CN 4-Morpholinecarboximidamide, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{NC-NH} \\
\hline
 & \text{CH}_2 - \text{N} \\
\hline
 & \text{CH}_2 - \text{N}
\end{array}$$

RN 89483-61-4 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino] (methylamino) methylene] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{NHMe} & \text{O} \\ \mid & \parallel \\ \text{CH}_2 - \text{N} & \text{C} - \text{NH} - \text{C} - \text{NH}_2 \\ \end{array}$$

RN 89483-62-5 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino](2-propenylamino)methylene]- (9CI) (CA INDEX NAME)

$$CH_2-N=CH_2-CH=CH_2$$

$$CH_2-N=CH_2-CH=CH_2$$

$$CH_2-N=CH_2-CH=CH_2$$

IT 89483-51-2P 89483-52-3P 89483-55-6P

89483-57-8P 89483-59-0P 89483-64-7P

89483-65-8P 89499-25-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 89483-51-2 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino](methylamino)methylene]- (9CI) (CA INDEX NAME)

$$CH_2-N = CH_2-NH_2$$

$$CH_2-N = C-NH-C-NH_2$$

RN 89483-52-3 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]amino] (methylamino)methylene]-, (2E)-2-butenedioate
(9CI) (CA INDEX NAME)

CM 1

CRN 89483-51-2 CMF C18 H27 N5 O3

$$\begin{array}{c|c} \text{NHMe} & \text{O} \\ | & || \\ \text{CH}_2 - \text{N} & \text{CH}_2 - \text{NH}_2 \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 89483-55-6 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino](2-propenylamino)methylene]- (9CI) (CA INDEX NAME)

$$CH_2-N=C-NH_2$$

$$CH_2-N=C-NH-CH_2-CH=CH_2$$

RN 89483-57-8 CAPLUS

CN Urea, [(cyclopropylamino) [[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]methylene]- (9CI) (CA INDEX NAME)

RN 89483-59-0 CAPLUS

CN 4-Morpholinecarboximidamide, N-(aminocarbonyl)-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

RN 89483-64-7 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino] (methylamino)methylene]-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 89483-61-4 CMF C19 H29 N5 O3

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 89483-65-8 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]amino] (2-propenylamino)methylene]-, (2E)-2-butenedioate
(9CI) (CA INDEX NAME)

CM 1

CRN 89483-62-5 CMF C21 H31 N5 O3

$$\begin{array}{c} 0 \\ \text{NH-C-NH}_2 \\ \text{I} \\ \text{CH}_2 - \text{N} = \begin{array}{c} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \text{CH}_2 - \text{CH} = \text{CH}_2 \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 89499-25-2 CAPLUS

CN Urea, [[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]amino][(1,2,2-trimethylpropyl)amino]methylene]- (9CI)
(CA INDEX NAME)

L6 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:174667 CAPLUS

DOCUMENT NUMBER: 100:174667

TITLE: 4-(Cyanoguanidino)- and -[(cyanoguanidino)methyl]piper

idines

INVENTOR(S): Cornu, Pierre Jean; Perrin, Claude; Dumaitre, Bernard;

Streichenberger, Gilles

PATENT ASSIGNEE(S): Bouchara, Emile, Fr. SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 8303607 A1 19831027 WO 1983-FR66 19830408
W: AU, DK, HU, JP, US

	RW: AT	r, BE,	CF,	CG,	CH, CM, DE,	FR, GA, GB, LU, NL,	SE, S	SN, TD, TG
FR	2524887	7		A1	19831014	FR 1982-6128		19820408
FR	2524887	7		В3	19850118			
AU	8313741	L		A1	19831104	AU 1983-13741		19830408
ES	521346			A1	19840116	ES 1983-521346		19830408
JP	5950051	18		T2	19840329	JP 1983-501212		19830408
EP	105881			A1	19840425	EP 1983-901083		19830408
EP	105881			B1	19871223			
	R: AT	r, BE,	CH,	DE,	FR, GB, LI,	LU, NL, SE		
HU	34020			0	19850128	HU 1983-2236		19830408
CA	1209142	2		A1	19860805	CA 1983-425466		19830408
AT	31534			E	19880115	AT 1983-901083		19830408
DK	8305643	3		Α	19831208	DK 1983-5643		19831208
US	4579845	5		Α	19860401	US 1983-565030		19831208
PRIORIT	Y APPLN.	INFO	. :			FR 1982-6128	Α	19820408
						EP 1983-901083	Α	19830408
						WO 1983-FR66	Α	19830408

OTHER SOURCE(S): CASREACT 100:174667

GI

R¹

$$CH_2N$$
 CH_2N
 CH_2N

AB Piperidines I [R and R1 are H, alkyl, alkoxy, halo, CF3; R2 = H, alkyl, acyl; R3 = alkyl, alkenyl, cycloalkyl, heterocyclic group; NR2R3 = heterocycle; one of Z and Z1 is CH2, direct bond, and the other is CH(OH), CO; n and m are 0, 1] were prepared, and they are useful as antihypertensives and sedatives (no data). Isothiourea derivative II in MeOH was treated with MeNH2 at 25° to give I (R = R1 = R2 = H, Z = direct bond, Z1 = CH2, n = m = 0, R3 = Me).

IT 89483-76-1P 89483-82-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and condensation of, with amines)

RN 89483-76-1 CAPLUS

CN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{SMe} \\ | \\ \text{CH}_2 - \text{N} & \text{CH}_2 - \text{NH} - \text{CN} \end{array}$$

RN 89483-82-9 CAPLUS

CN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

SMe
$$CH_2-N=C-NH-CN$$

Me

IT 89483-75-0P 89483-81-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and N-acylation of, by dithiocarbonimidate ester derivative)

RN 89483-75-0 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

RN 89483-81-8 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

IT 89483-53-4P 89483-54-5P 89483-56-7P

89483-58-9P 89483-60-3P 89483-77-2P

89483-78-3P 89483-83-0P 89483-84-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 89483-53-4 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NHMe} \\ \hline \\ \text{O} & -\text{CH}_2 - \text{N} \end{array} \begin{array}{c} \text{CH}_2 - \text{N} \end{array} \begin{array}{c} \text{NHMe} \\ \text{C} - \text{NH} - \text{CN} \end{array}$$

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-(1,2,2-trimethylpropyl)- (9CI) (CA INDEX NAME)

RN 89483-56-7 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-2-propenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH-CN} \\ & \text{CH}_2 - \text{N} & \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array}$$

RN 89483-58-9 CAPLUS

CN Guanidine, N-cyano-N'-cyclopropyl-N''-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2-N & CH_2-N & C-NH \end{array}$$

RN 89483-60-3 CAPLUS

CN 4-Morpholinecarboximidamide, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{NC-NH} \\
\hline
 & \text{CH}_2 - \text{N} \\
\hline
 & \text{CH}_2 - \text{N}
\end{array}$$

RN 89483-77-2 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-(1-methylpropyl)- (9CI) (CA INDEX NAME)

RN 89483-78-3 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]-N''-propyl- (9CI) (CA INDEX NAME)

$$CH_2-N = CH_2-N$$

$$CH_2-N = C-NH-CN$$

RN 89483-83-0 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-2-propenyl- (9CI) (CA INDEX NAME)

$$CH_2-N=CH_2-CH=CH_2$$
 $CH_2-N=CH_2-CH=CH_2$
 $CH_2-CH=CH_2$

RN 89483-84-1 CAPLUS

CN Guanidine, N-cyano-N'-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N''-methyl- (9CI) (CA INDEX NAME)

$$CH_2-N=C-NH-CN$$

$$CH_2-N=C-NH-CN$$

$$CH_2-N=C-NH-CN$$

L6 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1937:38602 CAPLUS

DOCUMENT NUMBER: 31:38602 ORIGINAL REFERENCE NO.: 31:5435d-f

TITLE: Sympatholytic activity of derivatives of

aminomethyl-benzodioxane

AUTHOR(S): Bovet, Daniel; Simon, Annette

SOURCE: Archives Internationales de Pharmacodynamie et de

Therapie (1937), 55, 15-51 CODEN: AIPTAK; ISSN: 0003-9780

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB The pharmacol. behavior of diethylaminomethylbenzodioxane (883 F) is reviewed. The properties of 17 new derivs. were studied with regard to their toxicity and sedative action in the rabbit, and their effect on the normal dog and the dog anesthetized with chloralose. The antagonism to adrenaline hyperglucemia was measured in rabbits. Aminomethyl-3-benzodioxane (946 F), 7 secondary amines, 4 tertiary amines and 5 piperidine derivs. were used. They all showed a central action as well as

the adrenaline-antagonizing action. With the secondary amines, the toxicity rises with the mol. weight, but the adrenaline-antagonizing action reaches a maximum between 2 and 3 C atoms. In the tertiary series, the diethyl derivative is the most toxic and has the most anti-adrenaline action. Piperidine substitution increases the former and diminishes the latter property.

860185-26-8, 1,4-Benzodioxan, 2-(2-methyl-1-piperidylmethyl)-IT (preparation of)

860185-26-8 CAPLUS RN

1,4-Benzodioxan, 2-(2-methyl-1-piperidylmethyl)- (4CI) (CA INDEX NAME) CN

=> d ibib abs hitstr 1-24

ANSWER 1 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

2005:325699 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

142:392292

TITLE: Preparation of heterocyclic compounds, e.g.,

N-alkylpiperidin-3-yl substituted analogs as ligands for monoamine receptors and transporters for treating

drug addiction or drug dependence

Aquila, Brian M.; Bannister, Thomas D.; Cuny, Gregory INVENTOR(S):

D.; Hauske, James R.; Holland, Joanne M.; Persons, Paul E.; Radeke, Heike S.; Wang, Fengjiang; Shao,

US 2001-298057P P 20010613

Liming

PATENT ASSIGNEE(S): Sepracor, Inc., USA

U.S. Pat. Appl. Publ., 161 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 607,457.

CODEN: USXXCO

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			APPL	ICAT	ION 1	DATE						
US	JS 2005080078			A1 20050414			1	US 2	004-	7715	19	20040204						
US :	2003	0503	09		A1 20030313			1	US 2	001-	9511	20010912						
US :	2004	0777	06		A1 20040422			1	US 2	003-	6074	20030626						
WO	2005	0774	63		A2		2005	0825	1	WO 2	005-1	US36:	29	20050204				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	ΕE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		TJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ;	TZ,	ŪĠ,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	TG												
PRIORITY	APP	LN.	INFO	. :					1	US 2	001-	2735	30P]	2 (0010	305	

US 2001-951130 A3 20010912 US 2003-607457 A2 20030626 US 2000-231667P P 20000911 US 2004-771519 A 20040204

OTHER SOURCE(S):

MARPAT 142:392292

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. (4 Markush structures given), e.g., I [X = C(R3)2, O, SOO-2, AB NR2, NC(O)R7, NC(O)OR2, NS(O)2R7, C=O; Z = C(R3)2, C(O), O, NR, NC(0)OR, SOO-2; m = 1-5; n = 1-2; p = 0-2; q = 0-3; R = H, (cyclo)alkyl,(hetero)aryl, aralkyl, heteroaralkyl; R1 = H, alkyl, (hetero)aryl, aralkyl, heteroaralkyl; R, R1 may be connected through a covalent bond; R2 = H, alkyl, fluoroalkyl, aryl, heteroaryl, cycloalkyl; R3 = H, alkyl, aryl, OR2, OC(0)R2, CH2OR2, CO2R2; wherein any two instances of R3 may be connected by a covalent tether whose backbone consists of 1, 2, 3, or 4-carbon atoms; R4 = H, alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, OR; R5-6 = H, alkyl, (CH2)qY, aryl, heteroaryl, F, OR2, OC(O)R2, or an instance of CR5R6 taken together is C(O); R7 = (cyclo)alkyl, (hetero)aryl, aralkyl, or heteroaralkyl; R8-9 = H, alkyl, (CH2)qY, (hetero)aryl, F, OR2, OC(O)R2, or an instance of CR8R9 taken together is C(O); Y = OR2, N(R2)2, SO0-2R2, P(O)(OR2)2; any two instances of R2 may be connected through a covalent bond; a covalent bond may connect R4 and an instance of R5 or R6; any two instances of R5 and R6 may be connected through a covalent bond; any two geminal or vicinal instances of R8 and R9 may be connected through a covalent bond; and the stereochem. configuration at any stereocenter of I is R, S or a mixture of these configurations.] were prepared Examples include synthesis of several hundred compds. of structure I, functional assays for norepinephrine (NE), dopamine (DA) and serotonin (5-HT) antagonism, determination of NE, DA and 5-HT reuptake inhibition, spontaneous locomotor activity/antidepressant behavioral assay in rats and the synthesis of a 96-member combinatorial library in which the library compds. were screened for monoamine uptake inhibition. For instance, 3-((4-trifluoromethylphenoxy)methyl)piperidine trifluoroacetate was alkylated with 1-[(4-chlorophenyl)cyclobutyl]-2-chloroethanone (preparation given) and the resulting product reduced with NaBH4 to give II. All 4 enantiomers of II were prepared by a stereospecific synthesis, and X-ray crystallog. determination of one enantiomer allowed the absolute stereochem. of III to

be assigned. III had EC50 < 10 nM for DA reuptake inhibition compared to nomifensine = 11 nM. I are useful for the treatment of cocaine addiction or methamphetamine addiction.

IT 405089-42-1P 405089-43-2P 405089-44-3P 405089-46-5P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds., e.g., N-alkylpiperidin-3-yl substituted analogs as ligands for monoamine receptors and transporters)

RN 405089-42-1 CAPLUS

CN Piperidine, 1-[[(2S)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-(trifluoromethyl)phenoxy]methyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 405089-43-2 CAPLUS

CN Piperidine, 1-[[(2S)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-(trifluoromethyl)phenoxy]methyl]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 405089-44-3 CAPLUS

CN Piperidine, 1-[[(2R)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-(trifluoromethyl)phenoxy]methyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 405089-46-5 CAPLUS

CN Piperidine, 1-[[(2R)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-(trifluoromethyl)phenoxy]methyl]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:1106820 CAPLUS

DOCUMENT NUMBER:

142:198025

TITLE: Synthesis and structure-activity relationships of

1-aralkyl-4-benzylpiperidine and 1-aralkyl-4-

benzylpiperazine derivatives as potent σ ligands

AUTHOR(S): Costantino, Luca; Gandolfi, Francesca; Sorbi, Claudia;

Franchini, Silvia; Prezzavento, Orazio; Vittorio, Franco; Ronsisvalle, Giuseppe; Leonardi, Amedeo;

Poggesi, Elena; Brasili, Livio

CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di

Modena and Reggio Emilia, Modena, 41100, Italy

SOURCE: Journal of Medicinal Chemistry (2005), 48(1), 266-273

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:198025

GΙ

In the attempt to define more accurately structure-affinity relationships AB for $\sigma 1$ and $\sigma 2$ ligands, a series of aralkyl derivs. of 4-benzylpiperidine, e.g., I, were synthesized and tested on σ subtype receptors, in which the effect of modifications on the aralkyl moiety was studied in a systematic way. The affinity of the compds. varied to a great extent, with a $\sigma 2/\sigma 1$ selectivity ranging from 0.1 to 9. Thus, to confirm the ability of the piperazine derivative to bind to ol receptors in a different way than piperidines, a series of piperazine compds. were synthesized and tested; the comparison of their affinity with that of the corresponding piperidines strongly supported the possibility of a different binding mode. While the compds. were selective for σ vs serotonin 5-HT1A and dopamine D2 receptors, some compds. possessed a remarkable affinity for both σ and 5-HT1A receptors, with Ki in the nanomolar range, and were selective with respect to D2 receptors. They displayed also a partial agonist profile in a human 5-HT1A [35S]GTP γ S binding assay, suggesting their potential use as atypical antipsychotic agents.

IT 835872-03-2P

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation of $\sigma 1$, $\sigma 2$, 5-HT1A, and D2 receptor binding affinity, and structure-activity relationship of aralkyl(benzyl)piperidines and aralkyl(benzyl)piperazines starting from alcs. or ketones)

RN 835872-03-2 CAPLUS

CN Piperidine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-(phenylmethyl)-(9CI) (CA INDEX NAME)

IT 835872-14-5P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation of $\sigma 1$, $\sigma 2$, 5-HT1A, and D2 receptor binding affinity, and structure-activity relationship of aralkyl(benzyl)piperidines and aralkyl(benzyl)piperazines starting from

alcs. or ketones) 835872-14-5 CAPLUS

RN 835872-14-5 CAPLUS
CN Piperidine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-(phenylmethyl), ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 835872-03-2 CMF C21 H25 N O2

$$\begin{array}{c|c} CH_2-Ph \\ \hline \\ O \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:252514 CAPLUS

DOCUMENT NUMBER: 140:287395

TITLE: Preparation of antidepressant azaheterocyclylmethyl

derivs. of heterocycle-fused benzodioxans

INVENTOR(S): Zhou, Dahui; Stack, Gary Paul PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PATENT NO.					KIND DATE			i	APPL	ICAT:	DATE						
WO	WO 2004024730						1	WO 2	003-1	JS28	20030911						
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,
		LR.	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	sc,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,
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	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		•			-	-	-				CH,						
		FI.	FR.	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GO,	GW,	ML,	MR,	NE,	SN,	TD,	TG
US	2004												20030910				
CA	2498	134			AA 20040325					003-2	20030911						
	1537				A1		2005	0608]	EP 2	003-	7522	20030911				
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		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
BR	2003															0030	911
NO	2005	0017	69		Α		2005	0525]	NO 2	005-	1769			2	0050	411
PRIORIT											002-4					0020	912
									1	US 2	003-0	6591	67	7	A 2	0030	910
									1	WO 2	003-1	JS28	413	1	W 2	0030	911
omitab compae (a)				MARTI	D 3 CD	140.	2072	0.5									

OTHER SOURCE(S):

MARPAT 140:287395

GI

The title compds. [I; Q = II, III; R1-R3 = H, OH, halo, CN, carboxamido, etc.; X, Y = H, OH, halo, CN, etc.; or X and Y, taken together, form N:CR4CR5:N, N:CR4CR5:CH, N:CR4N:CH, N:CR4O, NHCR7:N, NHCR8:CH; R4, R5 = H, halo, NH2, mono- or dialkylamino, alkyl; R6 = H, alkyl; R7 = H, halo, CF3, etc.; R8 = H, halo, CF3, etc.; Z = O, S, NR9; R9 = H, alkyl; n = 0-2; m = 1-4 (with provisos); p = 1-3 (p+n = 2-3)], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as

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RN CN

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anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc.
addiction, sexual dysfunction and related illnesses, were prepared Thus,
reacting 4-bromobenzenesulfonic acid (2R)-8-methyl-2,3-
dihydro[1,4]dioxino[2,3-f]quinolin-2-ylmethyl ester with
3-azetidin-3-ylmethyl-5-fluoro-1H-indole in the presence of Et3N in DMSO
afforded (2S)-2-[3-(5-fluoro-1H-indol-3-ylmethyl)azetidin-1-ylmethyl]-8-
methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline. The exemplified compds. I
were tested for 5-HT transporter affinity, 5-HT1A receptor affinity, and
antagonistic activity at 5-HT1A receptors and biol. data were given.
pharmaceutical composition comprising the compound I is claimed.
676125-36-3P 676125-37-4P 676125-38-5P
676125-39-6P 676125-40-9P 676125-41-0P
676125-42-1P 676125-43-2P 676125-44-3P
676125-45-4P 676125-46-5P 676125-47-6P
676125-48-7P 676125-49-8P 676125-50-1P
676125-51-2P 676125-52-3P 676125-53-4P
676125-54-5P 676125-55-6P 676125-56-7P
676125-57-8P 676125-86-3P 676125-88-5P
676125-89-6P 676125-91-0P 676125-92-1P
676125-94-3P 676125-95-4P 676125-96-5P
676125-97-6P 676125-98-7P 676125-99-8P
676126-00-4P 676126-03-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of antidepressant azaheterocyclylmethyl derivs. of
```

1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

676125-36-3 CAPLUS

heterocycle-fused benzodioxans)

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RN 676125-37-4 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

RN 676125-38-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

•2 HCl

RN 676125-39-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 676125-40-9 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-41-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

•2 HCl

RN 676125-42-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-43-2 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676125-44-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 676125-43-2 CMF C26 H26 F N3 O2

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 676125-45-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676125-46-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676125-45-4 CMF C27 H28 F N3 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

CN

RN 676125-47-6 CAPLUS

1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, dihydrochloride, (2S)-(9CI) (CA INDEX NAME)

•2 HCl

RN 676125-48-7 CAPLUS
CN 1H-Indole-6-carbonitrile, 1-[[1-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

CRN 676125-48-7 CMF C28 H28 N4 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 676125-50-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-1-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-51-2 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-1-y1)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

●2 HCl

RN 676125-52-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[2-(6-fluoro-1H-indol-1-yl)ethyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-53-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[2-(6-fluoro-1H-indol-1-yl)ethyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

•2 HCl

RN 676125-54-5 CAPLUS
CN 1H-Indole-6-carbonitrile, 1-[2-[1-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-3-azetidinyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-55-6 CAPLUS
CN 1H-Indole-6-carbonitrile, 1-[2-[1-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-3-azetidinyl]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

•2 HCl

RN 676125-56-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-57-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

●2 HCl

RN 676125-86-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-88-5 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-89-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-91-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-92-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-94-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-95-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

RN 676125-96-5 CAPLUS

CN 1H-Indole-6-carbonitrile, 1-[[1-[(2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 676125-97-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-1-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-98-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[2-(6-fluoro-1H-indol-1-yl)ethyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2 CH_2 CH_2 CH_2 CH_2

RN 676125-99-8 CAPLUS

CN 1H-Indole-6-carbonitrile, 1-[2-[1-[(2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl)methyl]-3-azetidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2 CH_2 CH_2 CH_2 CH_2 CH_2

RN 676126-00-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 676126-03-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:550738 CAPLUS

DOCUMENT NUMBER: 141:89093

TITLE: Preparation of azaheterocyclylmethyl derivatives of

heterocycle-fused benzodioxans as antidepressants

INVENTOR(S): Zhou, Dahui; Stack, Gary Paul

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S.

Provisional Ser. No. 410,168.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
							
US 2004132714	A1	20040708	US 2003-659167	20030910			
CA 2498134	AA	20040325	CA 2003-2498134	20030911			
WO 2004024730	A1	20040325	WO 2003-US28413	20030911			

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AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
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     EP 1537119
                          A1
                                                                    20030911
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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    NO 2005001769
                                            NO 2005-1769
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                                20050525
                                                                    20050411
PRIORITY APPLN. INFO.:
                                            US 2002-410168P
                                                                 Р
                                                                    20020912
                                            US 2003-659167
                                                                    20030910
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                                            WO 2003-US28413
                                                                    20030911
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OTHER SOURCE(S): MARPAT 141:89093

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AB (azaheterocyclylmethyl) heterocycle-fused benzodioxan derivs. [Q = Q1, Q2; R1, R2, R3, X, Y = H, HO, halo, cyano, carboxamido, C2-6 carboalkoxy, CF3, C1-6 alkyl, C1-6 alkoxy, C2-6 alkanoyl, C2-6 alkanoyloxy, amino, mono- or di(C1-6 alkyl)amino, C2-6 alkanamido, C1-6 alkanesulfonyl, C1-6 alkanesulfonamido; or X and Y, taken together, form -N:C(R4)C(R5):N-, -N:C(R4)C(R6):CH-, -N:C(R4)N:CH-, -N:C(R4)O-, -NHC(R7):N- or -NHC(R8):CH-; R4, R5 = H, halo, amino, mono- or di(C1-6 alkyl) amino, C1-6 alkyl; R8 = H, C1-6 alkyl; R7 = H, halo, CF3, pentafluoroethyl, amino, mono- or di(C1-6 alkyl)amino, C1-6 alkyl; R8 = H, halo, CF3, pentafluoroethyl, C1-6 alkyl; Z = 0, S, or NR9 (R9 = H, C1-6 alkyl); n = an integer 0, 1, or 2; m = aninteger from 1 to 4, provided that $m+n\leq 4$ and that when m=n=2, and Q is Q2 then X and Y are not NH-C(R8):CH-; p = an integer from 1 to 3, provided that p+n = 2 or 3] or pharmaceutically acceptable salts thereof are prepared These compds. inhibit serotonin reuptake and are antagonists of the 5HT1A receptor and are useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as pre-menstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses. Thus, a solution of (2R)-4-

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bromobenzenesulfonic acid (8-methyl-2,3-dihydro-[1,4]dioxino[2,3-
       f]quinolin-2-yl)methyl ester (0.35 g, 0.80 mmol), 3-[(azetidin-3-
       yl)methyl]-5-fluoro-1H-indole (0.19 g, 0.96 mmol), and Et3N (0.16 mL, 1.2
       mmol) in DMSO (20 mL) was heated at 90° under nitrogen overnight to
       give, after workup and silica gel chromatog., (S)-2-[[3-[(5-Fluoro-1H-
       indol-3-yl)methyl]azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-
       [1,4]dioxino{2,3-f}quinoline (II) as a brown oil which was converted into
       the dihydrochloride. II.2HCl and (S)-1-[2-[1-[(8-Methyl-2,3-dihydro-[1,4]-
       dioxino[2,3-f]quinolin-2-yl)methyl]azetidin-3-yl]ethyl]-1H-indole-6-
       carbonitrile showed an affinity to 5-HT1A serotonin receptor in displacing
       [3H]8-OHDPAT (dipropylaminotetralin) from 5-HT1A serotonin receptor in CHO
       cells with Ki of 2.50 and 1.52 nM, resp.
       676125-36-3P, (S)-2-[[3-[(5-Fluoro-1H-indol-3-y1)methyl]azetidin-1-
IT
       yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-37-4P, (S)-2-[[3-[(5-Fluoro-1H-indol-3-yl)methyl]piperidin-
       1-y1]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-38-5P, (S)-2-[{3-[(5-Fluoro-1H-indol-3-yl)methyl]azetidin-1-
       yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       dihydrochloride 676125-39-6P, (S)-2-[[3-[(5-Fluoro-1H-indol-3-
       y1) methyl]piperidin-1-yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino(2,3-
       f]quinoline dihydrochloride 676125-40-9P, (S)-2-[[3-{(6-Fluoro-
       1H-indol-3-yl)methyl]piperidin-1-yl]methyl]-8-methyl-2,3-dihydro-
       [1,4]dioxino[2,3-f]quinoline 676125-42-1P, (S)-2-[[3-(1H-Indol-3-
       ylmethyl)azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-
       f]quinoline 676125-43-2P, (S)-2-[[3-[(5-Fluoro-1-methyl-1H-indol-
       3-yl)methyl]azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-
       f]quinoline 676125-46-5P 676125-47-6P,
       (S)-2-[[4-[(6-Fluoro-1H-indol-1-yl)methyl]piperidin-1-yl]methyl]-8-ethyl-
       2,3-dihydro-[1,4]dioxino[2,3-f]quinoline dihydrochloride
       676125-50-1P, (S)-2-[[3-(6-Fluoroindol-1-ylmethyl)azetidin-1-
       yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-52-3P, (S)-2-[[3-[2-(6-Fluoroindol-1-yl)ethyl]azetidin-1-
       yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-56-7P, (S)-8-Methyl-2-[[3-[(5-methyl-1H-indol-3-
       yl)methyl]azetidin-1-yl]methyl]-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-86-3P, 2-[[3-[(5-Fluoro-1H-indol-3-yl)methyl]azetidin-1-
       yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-88-5P, 2-[[3-[(5-Fluoro-1H-indol-3-yl)methyl]piperidin-1-
       yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-89-6P, 2-[[3-[(6-Fluoro-1H-indol-3-yl)methyl]piperidin-1-
       yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       676125-91-0P, 2-[3-[(1H-Indol-3-yl)methyl]azetidin-1-yl]methyl]-
       8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline 676125-92-1P,
       2-[[3-[(5-Fluoro-1-methyl-1H-indol-3-yl)methyl]azetidin-1-yl]methyl]-8-
       methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline 676125-97-6P,
       2-[[3-(6-Fluoroindol-1-ylmethyl)azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-
       [1,4]dioxino[2,3-f]quinoline 676125-98-7P,
       2-[[3-[2-(6-Fluoroindol-1-yl)ethyl]azetidin-1-yl]methyl]-8-methyl-2,3-
       dihydro-[1,4]dioxino[2,3-f]quinoline 676125-99-8P
       676126-00-4P, 8-Methyl-2-[[3-[(5-methyl-1H-indol-3-
       y1) methyl] azetidin-1-y1] methyl] -2,3-dihydro-[1,4] dioxino[2,3-f] quinoline
       716323-02-3P, (S)-2-[[3-[(6-Fluoro-1H-indol-3-yl)methyl]piperidin-
       1-yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline
       hydrochloride 716323-03-4P, (S)-2-[[3-[(5-Fluoro-1-methyl-1H-
       indol-3-yl)methyl]azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-
       [1,4]dioxino[2,3-f]quinoline oxalate 716323-06-7P,
       (S)-2-[[3-(6-Fluoroindol-1-ylmethyl)azetidin-1-yl]methyl]-8-methyl-2,3-
       dihydro-[1,4]dioxino[2,3-f]quinoline hydrochloride 716323-07-8P,
       (S)-2-[[3-[2-(6-Fluoroindol-1-yl)ethyl]azetidin-1-yl]methyl]-8-methyl-2,3-
       dihydro-[1,4]dioxino[2,3-f]quinoline hydrochloride 716323-11-4P,
       (S) - 8 - Methyl - 2 - [[3 - [(5 - methyl - 1H - indol - 3 - yl) methyl] azetidin - 1 - yl] methyl] - (S) - 8 - Methyl - 2 - [[3 - [(5 - methyl - 1H - indol - 3 - yl) methyl] azetidin - 1 - yl] methyl] - (S) - 8 - Methyl - 2 - [[3 - [(5 - methyl - 1H - indol - 3 - yl) methyl] azetidin - 1 - yl] methyl] - (S) - 8 - Methyl - 2 - [[3 - [(5 - methyl - 1H - indol - 3 - yl) methyl] azetidin - 1 - yl] methyl] - (S) 
       2,3-dihydro-[1,4]dioxino[2,3-f]quinoline hydrochloride
       RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
```

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (azaheterocyclylmethyl)heterocycle-fused benzodioxans having affinity to 5-HT1A serotonin receptor as antidepressants)

RN 676125-36-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-37-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-38-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

●2 HCl

RN 676125-39-6 CAPLUS CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-

1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, dihydrochloride, (2S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

•2 HCl

RN 676125-40-9 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676125-42-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-43-2 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676125-46-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676125-45-4 CMF C27 H28 F N3 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 676125-47-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2-[[4-[(6-fluoro-1H-indol-1-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, dihydrochloride, (2S)-(9CI) (CA INDEX NAME)

●2 HCl

RN 676125-50-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-1-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-52-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[2-(6-fluoro-1H-indol-1-yl)ethyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676125-56-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676125-86-3 CAPLUS

CN

1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-89-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-91-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[3-(1H-indol-3-ylmethyl)-1-azetidinyl]methyl]-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-92-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-97-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-1-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676125-98-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[2-(6-fluoro-1H-indol-1-yl)ethyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2 CH_2 CH_2 CH_2 CH_2

RN 676125-99-8 CAPLUS

CN 1H-Indole-6-carbonitrile, 1-[2-[1-[(2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl)methyl]-3-azetidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2

RN 676126-00-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 716323-02-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-3-y1)methy1]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

● HCl

RN 716323-03-4 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(5-fluoro-1-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676125-43-2 CMF C26 H26 F N3 O2

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 716323-06-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[(6-fluoro-1H-indol-1-yl)methyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 716323-07-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3-[2-(6-fluoro-1H-indol-1-yl)ethyl]-1-azetidinyl]methyl]-2,3-dihydro-8-methyl-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 716323-11-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[3-[(5-methyl-1H-indol-3-yl)methyl]-1-azetidinyl]methyl]-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

● HCl

ANSWER 5 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN L6

ACCESSION NUMBER: 2002:849636 CAPLUS

DOCUMENT NUMBER: 137:353036

Preparation of antipsychotic aminomethyl derivatives TITLE:

of 7,8-dihydro-3H-6,9-dioxa-2,3-diaza-

cyclopenta[a]naphthalene

INVENTOR(S): Stack, Gary Paul; Tran, Megan

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

PCT Int. Appl., 38 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE				
HO 2002000	122	7.1	20021107	WO 2002 WOJ 2004					
WO 2002088	133	ΑI	20021107	WO 2002-US13284	20020426				
W: AE	, AG, AL	, AM, AI	r, Au, Az,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,				
CO	, CR, CU	, CZ, DE	E, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,				
GM	, HR, HU	, ID, IL	L, IN, IS,	JP, KE, KG, KP, KR,	KZ, LC, LK, LR,				
LS	, LT, LU	, LV, MA	A, MD, MG,	MK, MN, MW, MX, MZ,	NO, NZ, OM, PH,				
PL	, PT, RC	, RU, SE), SE, SG,	SI, SK, SL, TJ, TM,	TN, TR, TT, TZ,				
UA	, UG, UZ	, VN, YU	J, ZA, ZM,	ZW, AM, AZ, BY, KG,	KZ, MD, RU, TJ, TM				
RW: GH	, GM, KE	, LS, MW	N, MZ, SD,	SL, SZ, TZ, UG, ZM,	ZW, AT, BE, CH,				
CY	, DE, DK	, ES, FI	[, FR, GB,	GR, IE, IT, LU, MC,	NL, PT, SE, TR,				
BF	, BJ, CF	, CG, CI	CM, GA,	GN, GQ, GW, ML, MR,	NE, SN, TD, TG				
US 2002183	331	A1	20021205	US 2002-128748	20020423				
US 6800641		B2	20041005						
PRIORITY APPLN.	INFO.:			US 2001-286568P	P 20010426				
OTHER SOURCE(S)	:	MARPAT	137:3530	36					
GT									

GΙ

$$\begin{array}{c}
R^1 \\
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N \\
R^2
\end{array}$$

Ι

AB The title compds. [I; R1 = H, halo, CN, etc.; R2 = H, OH, halo, etc.; Z = (un)substituted piperazino, piperidino, etc.], useful for treatment of disorders of the dopaminergic system, such as schizophrenia, schizoaffective disorder, bipolar disorder, Parkinson's disease, L-DOPA induced psychoses and dyskinesias, Tourette's syndrome and hyperprolactinemia and in the treatment of drug addiction such as the addiction to ethanol, nicotine or cocaine and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro-7H-[1,4]dioxino[2,3-e]indazol-2-ylmethyl 4-methylbenzenesulfonate (multi-step preparation given) with PhCH2NH2 in DMSO afforded 84% (S)-I [R1, R2 = H; Z = NHCH2Ph] which showed IC50 of 0.45 nM against D2 receptor binding.

T 474383-13-6P 474383-14-7P 474383-24-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(preparation of antipsychotic aminomethyl derivs. of 7,8-dihydro-3H-6,9-dioxa-2,3-diaza-cyclopenta[a]naphthalene)

RN 474383-13-6 CAPLUS

CN 7H-1,4-Dioxino[2,3-e]indazole, 2-[[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 474383-14-7 CAPLUS

CN 7H-1,4-Dioxino[2,3-e]indazole, 2-[[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (2S)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474383-13-6 CMF C24 H25 F N4 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 474383-24-9 CAPLUS

CN 7H-1,4-Dioxino[2,3-e]indazole, 2-[[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

7

ACCESSION NUMBER: 2002:716282 CAPLUS

DOCUMENT NUMBER:

137:247706

Preparation of antidepressant azaheterocyclylmethyl TITLE:

derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinoline

Tran, Megan; Stack, Gary Paul INVENTOR(S):

Wyeth, John, and Brother Ltd., USA PATENT ASSIGNEE(S):

PCT Int. Appl., 66 pp. SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'								APPLICATION NO.						DATE				
WO	2002072587			A1	1 20020919			1	002-	US71		20020312						
	W: AE, AG, AL,			AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DΕ,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	UΖ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
US	6458	802			B2 20021001				US 2002-95505						20020312			
						A1 20021107												
					A1 20040303 EP 2002-7213						25	20020312						
EP	1392	697			B1 20041103													
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
AT	2814	59 ·	•	•	E	·	2004	1115		AT 2	002-	7213	25		2	0020	312	
PT								PT 2002-721325										
	2230							ES 2002-2721325										
	US 2003045542									US 2002-228744								
	US 6599915						2003	0729										
PRIORITY										JS 2	001-	2755	64P		P 2	0010	314	
		•									002-							
											002-		_					
OTHER SO	OTHER SOURCE(S):					PAT	137:	2477					-		_			

OTHER SOURCE(S):

GI

AB The title compds. [I; R1 = H, OH, halo, CN, etc.; R2-R5, R7 = H, OH, halo, etc.; R6 = H, alkyl; A, D = CR1, N (provided that at least one of A and D = N); E, G = CR1; Z = N, CR7; n = 0-2], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa, bulimia nervosa, vasomotor flushing, cocaine and alc. addition, sexual dysfunction and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-ylmethyl-4-methylbenzenesulfonate (multi-step preparation given) with

5-methoxy-3-(1,2,3,6-

tetrahydro-4-pyridyl)-1H-indole in DMSO afforded (S)-II. All 23 prepared compds. I were tested in the three standard exptl. tests for serotonin 5-HT1A receptor activity (biol. data given).

Ι

II

IT 460353-59-7P 460353-64-4P 460353-84-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinoline)

RN 460353-59-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (2S)- (9CI) (CA INDEX NAME)

RN 460353-64-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-84-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (2S)-, ethanedioate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 460353-59-7 CMF C26 H26 F N3 O2

2 CM

CRN 144-62-7 CMF C2 H2 O4

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS 2

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:220550 CAPLUS

DOCUMENT NUMBER:

136:263097

TITLE:

Preparation of heterocyclic compounds, e.g.,

N-alkylpiperidin-3-yl substituted analogs as ligands

for monoamine receptors and transporters.

INVENTOR(S):

Aquila, Brian M.; Bannister, Thomas D.; Cuny, Gregory D.; Hauske, James R.; Holland, Joanne M.; Persons,

Paul E.; Radeke, Heike; Wang, Fengjian; Shao, Liming

PATENT ASSIGNEE(S): SOURCE:

Sepracor, Inc., USA PCT Int. Appl., 275 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND		DATE			APPLICATION NO.						DATE		
WO 2002022572				A2		20020321			WO 2	001-1		20010912						
WO 2002022572			A3 20020801															
	W :	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,	
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	
		UΖ,	VN,	ΥU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM			
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
CA 2422055					AA	AA 20020321			1	CA 2	001-2	20010912						

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AU 2001090873
                       A5
                              20020326
                                         AU 2001-90873
                                                               20010912
                              20030618
                                        EP 2001-970926
                                                               20010912
    EP 1318988
                       A2
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    JP 2004509103
                       T2
                              20040325
                                         JP 2002-526825
                                                               20010912
PRIORITY APPLN. INFO.:
                                         US 2000-231667P
                                                            P 20000911
                                         US 2001-273530P
                                                          P 20010305
                                         US 2001-298057P
                                                          P 20010613
                                         US 2000-273530P
                                                          P 20010305
                                                          P 20010613
                                         US 2000-298057P
                                                          W 20010912
                                         WO 2001-US28654
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OTHER SOURCE(S): MARPAT 136:263097

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. (4 Markush structures given), e.g., I [X = C(R3)2, O, SO0-2, NR2, NC(0)R7, NC(0)OR2, NS(0)2R7, C=0; Z = C(R3)2, C(0), O, NR, NC(0)OR,SO0-2; m = 1-5; n = 1-2; p = 0-2; q = 0-3; R = H, (cyclo)alkyl,(hetero)aryl, aralkyl, heteroaralkyl; R1 = H, alkyl, (hetero)aryl, aralkyl, heteroaralkyl; R, R1 may be connected through a covalent bond; R2 = H, alkyl, fluoroalkyl, aryl, heteroaryl, cycloalkyl; R3 = H, alkyl, aryl, OR2, OC(O)R2, CH2OR2, CO2R2; wherein any two instances of R3 may be connected by a covalent tether whose backbone consists of 1, 2, 3, or 4-carbon atoms; R4 = H, alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, OR; R5-6 = H, alkyl, (CH2)qY, aryl, heteroaryl, F, OR2, OC(O)R2, or an instance of CR5R6 taken together is C(0); R7 = (cyclo)alkyl, (hetero)aryl, aralkyl, or heteroaralkyl; R8-9 = H, alkyl, (CH2)qY, (hetero)aryl, F, OR2, OC(0)R2, or an instance of CR8R9 taken together is C(0); Y = OR2, N(R2)2, SO0-2R2, P(0) (OR2)2; any two instances of R2 may be connected through a covalent bond; a covalent bond may connect R4 and an instance of R5 or R6; any two instances of R5 and R6 may be connected through a covalent bond; any two geminal or vicinal instances of R8 and R9 may be connected through a covalent bond; and the stereochem. configuration at any stereocenter of I is R, S or a mixture of these configurations.] were prepared Examples include synthesis of several hundred compds. of structure I, functional assays for norepinephrine (NE), dopamine (DA) and serotonin (5-HT) antagonism, determination of NE, DA and 5-HT reuptake inhibition, spontaneous locomotor activity/antidepressant behavioral assay in rats and the synthesis of a 96-member combinatorial library in which the library compds. were screened for monoamine uptake inhibition. For instance, 3-((4-trifluoromethylphenoxy)methyl)piperidine trifluoroacetate was alkylated with 1-[(4-chlorophenyl)cyclobutyl]-2-chloroethanone (preparation given) and the resulting product reduced with NaBH4 to give II. All 4 enantiomers of II were prepared by a stereospecific synthesis, and X-ray crystallog. determination of one enantiomer allowed the absolute stereochem. of III to

be assigned. III had EC50 < 10 nM for DA reuptake inhibition compared to nomifensine = 11 nM. I are useful for the treatment of depression, sexual dysfunction, Alzheimer's disease, anxiety, etc.

405089-42-1P 405089-43-2P 405089-44-3P 405089-46-5P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds., e.g., N-alkylpiperidin-3-yl substituted analogs as ligands for monoamine receptors and transporters)

RN405089-42-1 CAPLUS

CN Piperidine, 1-[[(2S)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-

Page 109

(trifluoromethyl)phenoxy]methyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 405089-43-2 CAPLUS

CN Piperidine, 1-[[(2S)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-(trifluoromethyl)phenoxy]methyl]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 405089-44-3 CAPLUS

CN Piperidine, 1-[[(2R)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-(trifluoromethyl)phenoxy]methyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 405089-46-5 CAPLUS

CN Piperidine, 1-[[(2R)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-[[4-(trifluoromethyl)phenoxy]methyl]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:31495 CAPLUS

DOCUMENT NUMBER: 134:95527

TITLE: Tetrahydronaphthyl, benzopyranyl, and benzodioxanyl

derivatives for reducing cravings to food or an

addictive substance

INVENTOR(S): Luscombe, Graham Paul; Needham, Patricia Lesley

PATENT ASSIGNEE(S): Knoll Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT						DATE				ICAT				D.	ATE	
	2001	0023	91		A2										2	0000	621
WO	2001	0023	91		A3		2001	0712									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		ΥU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM				
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
CA	2378	389			AA		2001	0111		CA 2	2000-	2378	389		2	0000	621
EP	1198	234			A2		2002	0424		EP 2	2000-	9438	52		2	0000	621
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL							
JP	2003	5034	91		T2		2003	0128		JP 2	2001-	5078	28		2	0000	621
PRIORITY APPLN. INFO.:								GB 1	999-	1561	6		A 1	9990	705		
										WO 2	2000-1	EP57	35	1	W 2	0000	621
OTHER SOURCE(S):				MAR	PAT	134:	9552	7									

$$(R^1)_g$$

$$A$$

$$B$$

$$R^2$$

$$R^3$$

$$R^3$$

GI

$$-\overset{R^5}{\text{N}} - \overset{\text{X}}{\text{N}} - \overset{\text{X}}{\text{N}$$

01

$$-N \stackrel{X}{\sim} V - N \stackrel{R5}{\sim}$$

 Q^2

Ι

AB Compds. I [A, B = CH2, O; g = 0-4; R1 = halo, (substituted) alkyl, (substituted) alkoxy, etc.; R2 = H, alkyl, alkoxy; R3, R4 = H, alkyl; U =

CN

(alkyl-substituted) alkylene; Q = N(R5)V'NH, Q1, Q2; V = bond, (alkyl-substituted) alkylene; V' = (alkyl-substituted) alkylene; X = bond, alkylene; X' = alkylene; provided that total number of C atoms in X and X' amts. to 3 or 4; R5 = H, alkyl; T = (substituted) aromatic group which optionally contains ≥1 N atoms, provided that T is not

2-pyrimidinyl when A is O], and pharmaceutically acceptable salts thereof, have utility in reducing cravings to food or an addictive substance.

IT 170352-81-5 170352-81-5D, enantiomers

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tetrahydronaphthyl, benzopyranyl, and benzodioxanyl derivs. for reducing cravings to food or addictive substance)

RN 170352-81-5 CAPLUS

4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 170352-81-5 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:653176 CAPLUS

DOCUMENT NUMBER: 133:362741

TITLE: New Substituted 1-(2,3-Dihydrobenzo[1,4]dioxin-2-

ylmethyl)piperidin-4-yl Derivatives with $\alpha 2$ -Adrenoceptor Antagonist Activity

AUTHOR(S): Mayer, Patrice; Brunel, Pascale; Chaplain, Celine;

Piedecoq, Christel; Calmel, Francis; Schambel, Philippe; Chopin, Philippe; Wurch, Thierry; Pauwels,

Petrus J.; Marien, Marc; Vidaluc, Jean-Louis; Imbert,

Thierry

CORPORATE SOURCE: Division of Medicinal Chemistry Department of

Analytical Chemistry Division of Neurobiology and Department of Cellular and Molecular Biology, Centre

de Recherche Pierre Fabre, Castres, 81100, Fr. Journal of Medicinal Chemistry (2000), 43(20),

3653-3664

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:362741

GI

SOURCE:

The emergence of a novel theory concerning the role of noradrenaline in the progression and the treatment of neurodegenerative diseases such as Parkinson's and Alzheimer's diseases has provided a new impetus toward the discovery of novel compds. acting at α2-adrenoceptors. A series of substituted 1-(2,3-dihydrobenzo[1,4]dioxin-2-ylmethyl)piperidin-4-yl derivs., e.g., I, bearing an amide, urea, or imidazolidinone moiety was studied. Some members of this series of compds. proved to be potent α2-adrenoceptor antagonists with good selectivity vs. α1-adrenergic and D2-dopamine receptors. Particular emphasis is given to compound I which displays potent α2-adrenoceptor binding affinity in vitro and central effects in vivo following oral administration.

Ι

IT 194611-91-1P 194612-13-0P 202002-17-3P 202002-19-5P 202002-21-9P 202002-25-3P 306967-85-1P 306968-03-6P 306968-12-7P 306968-23-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation, binding affinity and bioactivity of substituted dihydrobenzodioxinylmethylpiperidines as $\alpha 2$ -adrenoceptor antagonists)

RN 194611-91-1 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-phenyl- (9CI) (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2

RN 194612-13-0 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-1,3,4,5-tetrahydro-(9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ CH_2 - CH_2 - CH_2 - N \\ O \\ \end{array}$$

RN 202002-17-3 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & O \\ \hline \\ O & \\ CH_2 - CH_2 - NH - C - NHPh \\ \end{array}$$

RN 202002-19-5 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N-methyl-N'-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me O} \\ \mid & \parallel \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{N--}\text{C--}\text{NHPh} \\ \end{array}$$

RN 202002-21-9 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N-methyl-N-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{O} & \text{Ph} \\ \parallel & \parallel \\ & \text{CH}_2-\text{CH}_2-\text{NH}-\text{C}-\text{N}-\text{Me} \end{array}$$

RN 202002-25-3 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N,N'-dimethyl-N'-phenyl- (9CI) (CA INDEX NAME)

RN 306967-85-1 CAPLUS

CN Urea, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 306968-03-6 CAPLUS

CN Thiourea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 306968-12-7 CAPLUS

CN Urea, N-[3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]propyl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 306968-23-0 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2 - CH_2 -$$

Page 115

dihydrobenzodioxinylmethylpiperidines as $\alpha 2$ -adrenoceptor antagonists)

RN 194611-90-0 CAPLUS

CN 2(1H)-Pyrimidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]tetrahydro-3-phenyl- (9CI) (CA INDEX NAME)

RN 194612-00-5 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

RN 194612-03-8 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(4-pyridinyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-02-7 CMF C24 H30 N4 O3

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194612-04-9 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2,6-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 194612-05-0 CAPLUS

CN 2-Imidazolidinone, 1-(2,6-diethoxyphenyl)-3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$
 CH_2-CH_2-N
 EtO

RN 194612-07-2 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2,6-dimethylphenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-06-1 CMF C27 H35 N3 O3

$$CH_2-CH_2-N$$
 Me
 Me
 Me

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194612-08-3 CAPLUS

CN 2-Imidazolidinone, 1-(2,6-dichlorophenyl)-3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

HCl

RN 194612-09-4 CAPLUS

CN 2-Imidazolidinone, 1-[2,6-bis(1-methylethyl)phenyl]-3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & i-Pr \\ \hline O & CH_2-CH_2-N \\ \hline & i-Pr \\ \hline \end{array}$$

RN 194612-10-7 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2,4,6-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$
OMe

 N
OMe

 N
OMe

RN 202002-33-3 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-(phenylmethyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-32-2 CMF C24 H31 N3 O3

$$\begin{array}{c|c} O & & O \\ \parallel & & \parallel \\ O & CH_2 - CH_2 - NH - C - NH - CH_2 - Ph \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-36-6 CAPLUS
CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4 piperidinyl]ethyl]-N'-(4-methoxyphenyl)-, ethanedioate (1:1) (9CI) (CA
 INDEX NAME)

CM 1

CRN 202002-35-5 CMF C24 H31 N3 O4

$$\begin{array}{c|c} O & O \\ \hline \\ O & CH_2-CH_2-NH-C-NH \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-38-8 CAPLUS
CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4
ninoridinyllothyll NH (4 nitrophonyl) othonodioxto (1.1)

piperidinyl]ethyl]-N'-(4-nitrophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-37-7 CMF C23 H28 N4 O5

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-43-5 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & O \\ \hline O & CH_2-CH_2-NH-C-NH \\ \hline \end{array}$$

RN 202002-51-5 CAPLUS

CN Urea, N-cyclohexyl-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-50-4 CMF C23 H35 N3 O3

$$\begin{array}{c|c} O & & & & O \\ \hline O & & & & \\ \hline O & & & \\ \hline O & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & &$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-53-7 CAPLUS

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CN Benzamide, N-[[[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]amino]carbonyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-52-6 CMF C24 H29 N3 O4

$$\begin{array}{c|c} O & O \\ \parallel & \parallel \\ CH_2-CH_2-NH-C-NH-C-Ph \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 306967-91-9 CAPLUS

CN Benzamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 306967-92-0 CAPLUS

CN Benzamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-2-nitro- (9CI) (CA INDEX NAME)

RN 306967-94-2 CAPLUS

CN Benzamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-2-methoxy-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 306967-93-1

CMF C24 H30 N2 O4

$$\begin{array}{c|c} O & & & \\ \hline \\ O & CH_2 - N \\ \hline \end{array}$$

$$\begin{array}{c|c} CH_2 - CH_2 - NH - C \\ \hline \\ MeO \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 306967-96-4 CAPLUS

CN Benzeneacetamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-2-methoxy-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 306967-95-3 CMF C25 H32 N2 O4

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 306967-97-5 CAPLUS

CN Benzeneacetamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-2-nitro- (9CI) (CA INDEX NAME)

RN 306967-99-7 CAPLUS

CN Benzeneacetamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- α -phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 306967-98-6 CMF C30 H34 N2 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 306968-00-3 CAPLUS

CN Benzenesulfonamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 306968-05-8 CAPLUS

CN Benzamide, N-[[[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]amino]thioxomethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & O \\ \parallel & \parallel \\ CH_2-CH_2-NH-C-NH-C-Ph \end{array}$$

● HCl

RN 306968-14-9 CAPLUS

CN Carbamic acid, [2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, phenyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & O \\ \hline \\ O & CH_2 - CH_2 - NH - C - OPh \end{array}$$

RN 306968-25-2 CAPLUS

CN 1H-Isoindol-1-one, 2-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ CH_2 - CH_2 - CH_2 - N \end{array}$$

RN 306968-28-5 CAPLUS

CN Thiourea, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & \\ \parallel & \\ CH_2-NH-C-NHPh \\ \end{array}$$

● HCl

RN 306968-32-1 CAPLUS

CN Methanesulfonamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 306968-31-0 CMF C17 H26 N2 O4 S

$$\begin{array}{c|c} O & & O \\ \hline \\ O & CH_2 - N \\ \hline \\ O & CH_2 - N \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

IT 89483-75-0P 194612-27-6P 194612-28-7P 194612-30-1P 194612-31-2P 306967-87-3P 306967-88-4P 306967-89-5P 306968-06-9P 306968-07-0P 306968-10-5P 306968-11-6P 306968-21-8P 306968-22-9P 306968-26-3P 306968-27-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, binding affinity and bioactivity of substituted dihydrobenzodioxinylmethylpiperidines as $\alpha 2$ -adrenoceptor antagonists)

RN 89483-75-0 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

RN 194612-27-6 CAPLUS

CN 4-Piperidineethanol, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

RN 194612-28-7 CAPLUS

CN Piperidine, 4-(2-chloroethyl)-1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

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$$\begin{array}{c|c} CH_2-CH_2C1 \\ \hline \\ O \end{array}$$

RN 194612-30-1 CAPLUS

RN 194612-31-2 CAPLUS

CN 4-Piperidineethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CH_2-NH_2 \\ \hline \\ CH_2-N \end{array}$$

RN 306967-87-3 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N[(2-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 306967-88-4 CAPLUS

CN 4-Piperidinemethanamine, N-[(2-aminophenyl)methyl]-1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

RN 306967-89-5 CAPLUS

CN 2(1H)-Quinazolinone, 3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3,4-dihydro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2 & CH_2 & N \\ \hline \\ O & H \\ \end{array}$$

RN 306968-06-9 CAPLUS

CN Carbamic acid, [2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ CH_2-CH_2-NH-C-OEt \end{array}$$

RN 306968-07-0 CAPLUS

CN 4-Piperidineethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{CH}_2-\text{CH}_2-\text{NHMe} \\ \hline \\ \text{CH}_2-\text{N} \end{array}$$

RN 306968-10-5 CAPLUS

CN 4-Piperidinepropanenitrile, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

RN 306968-11-6 CAPLUS

CN 4-Piperidinepropanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl](9CI) (CA INDEX NAME)

RN 306968-21-8 CAPLUS

CN Ethanediamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 306968-22-9 CAPLUS

CN 1,2-Ethanediamine, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-4-

piperidinyl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 306968-26-3 CAPLUS

CN 4-Piperidineethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-[2-(2-nitrophenyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2-CH_2-NH-CH_2-CH_2\\ \hline \\ O_2N & \end{array}$$

RN 306968-27-4 CAPLUS

CN 4-Piperidineethanamine, N-[2-(2-aminophenyl)ethyl]-1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CH_2-NH-CH_2-CH_2\\ \hline \\ H_2N \end{array}$$

IT 194611-92-2P 194612-14-1P 194612-16-3P 202002-18-4P 202002-26-4P 306967-86-2P

202002-18-4P 202002-26-4P 306967-86-2F

306967-90-8P 306968-02-5P 306968-04-7P

306968-08-1P 306968-13-8P 306968-16-1P

306968-24-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation, binding affinity and bioactivity of substituted dihydrobenzodioxinylmethylpiperidines as $\alpha 2$ -adrenoceptor

antagonists)

RN 194611-92-2 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194611-91-1 CMF C25 H31 N3 O3

$$CH_2-CH_2-N$$
 Ph

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 194612-14-1 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-1,3,4,5-tetrahydro-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-13-0 CMF C25 H31 N3 O3

$$CH_2-CH_2-N$$
 N
 N
 N
 N

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 194612-16-3 CAPLUS

CN 2(1H)-Quinazolinone, 3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3,4-dihydro-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-15-2 CMF C24 H29 N3 O3

$$\begin{array}{c|c} CH_2-CH_2-N \\ \hline \\ O \\ H \end{array}$$

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CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 202002-18-4 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]ethyl]-N'-phenyl-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-17-3 CMF C23 H29 N3 O3

$$\begin{array}{c|c} O & & O \\ \hline \\ O & CH_2-CH_2-NH-C-NHPh \\ \hline \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 202002-26-4 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]ethyl]-N,N'-dimethyl-N'-phenyl-, ethanedioate (1:1) (9CI) (CA
INDEX NAME)

CM 1

CRN 202002-25-3 CMF C25 H33 N3 O3

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CRN 144-62-7 CMF C2 H2 O4

RN 306967-86-2 CAPLUS

CN Urea, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & O \\ \parallel & & \\ \hline O & & CH_2-NH-C-NHPh \end{array}$$

● HCl

RN 306967-90-8 CAPLUS

CN 2(1H)-Quinazolinone, 3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3,4-dihydro-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 306967-89-5 CMF C23 H27 N3 O3

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 306968-02-5 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N-methyl-N-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM · 1

CRN 202002-21-9 CMF C24 H31 N3 O3

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 306968-04-7 CAPLUS
CN Thiourea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 306968-03-6 CMF C23 H29 N3 O2 S

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 306968-08-1 CAPLUS
CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]ethyl]-N-methyl-N'-phenyl-, ethanedioate (1:1) (9CI) (CA
INDEX NAME)

CM 1

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CRN 202002-19-5 CMF C24 H31 N3 O3

$$\begin{array}{c|c} & \text{Me O} \\ & \parallel \\ & \parallel \\ & \text{CH}_2-\text{CH}_2-\text{N-C-NHPh} \\ \\ & \text{O} \\ & \text{CH}_2-\text{CH}_2-\text{N-C-NHPh} \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 306968-13-8 CAPLUS
CN Urea, N-[3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]propyl]-N'-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 306968-12-7 CMF C24 H31 N3 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 306968-16-1 CAPLUS

CN 4-Piperidineethanol, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, phenylcarbamate (ester), ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 306968-15-0

CMF C23 H28 N2 O4

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 306968-24-1 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$

HCl

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:420927 CAPLUS

DOCUMENT NUMBER: 131:102028

TITLE: Preparation of cyclic amine derivatives

INVENTOR(S): Kato, Hideo; Iwasaki, Nobuhiko; Ikeda, Yoshitaka;

Azuma, Teijiro

PATENT ASSIGNEE(S): Hokurika Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 11180979	A2	19990706	JP 1998-80369		19980312
PRIORITY APPLN. INFO.:			JP 1997-303800	Α	19971017

OTHER SOURCE(S): MARPAT 131:102028

GI

Title compds. $\{I; R1 = H, 7-C1, 7-CH3; Z = H; Y = H; Y-Z = -CH2CH2,$ AB -CH2CH2CH2; m = 0-2; n = 1-4; X = CH, O; R = CO2Et, CO2H, CONHPr-i, CONHPh, CONH2, NHSO2Me, etc.; R2 = CH3, H, CH3(CH2)5, CH3(CH2)2, CH3(CH2)5, etc.], stereoisomers, and pharmaceutical acceptable salts as α2b adrenaline inhibitors are prepared in treatment of central nervous system diseases, such as, emothion induced digestive hypofunction, hypertension, obesity, etc. Thus, the title compound I (R1 = H; X = O; Y =H; Z = H; m = 0; n = 4; R = CO2Et; R2 = H) was prepared IT 230314-14-4P 230314-15-5P 230314-16-6P 230314-17-7P 230314-18-8P 230314-20-2P 230314-21-3P 230314-63-3P 230314-64-4P 230314-84-8P 230314-85-9P 230314-86-0P 230314-87-1P 230314-89-3P 230314-90-6P 230315-15-8P 230315-16-9P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation of arylamino aliphatic acid derivs.) RN230314-14-4 CAPLUS CN Glycine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-

piperidinyl]methyl]-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ CH_2-NH-CH_2-C-OEt \\ \end{array}$$

•2 HCl

RN 230314-15-5 CAPLUS

CN β-Alanine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & O \\ \parallel & \parallel \\ O & CH_2 - NH - CH_2 - CH_2 - C - OEt \end{array}$$

●2 HCl

RN 230314-16-6 CAPLUS

CN Butanoic acid, 4-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 230314-17-7 CAPLUS

CN β-Alanine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]-N-methyl-, ethyl ester, dihydrochloride (9CI) (CA
INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{O} \\ & \text{H} & \text{H} \\ & \text{CH}_2-\text{N-CH}_2-\text{CH}_2-\text{C-OEt} \\ & \text{O} \\ & \text{CH}_2-\text{N-CH}_2-\text{CH}_2-\text{C-OEt} \\ & \text{CH}_2-\text{N-CH}_2-\text{CH}_2-\text{C-OET} \\ & \text{CH}_2-\text{N-CH}_2-\text{C-OET} \\ & \text{CH}_2-\text{C-OET} \\ & \text{C-OET} \\$$

•2 HCl

RN 230314-18-8 CAPLUS

CN β-Alanine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]-N-propyl-, ethyl ester, dihydrochloride (9CI) (CA
INDEX NAME)

•2 HCl

RN 230314-20-2 CAPLUS

CM 1

CRN 230314-19-9 CMF C26 H42 N2 O4

$$\begin{array}{c} O \\ | \\ CH_2-CH_2-C-OEt \\ | \\ CH_2-N-(CH_2)_5-Me \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 230314-21-3 CAPLUS

CN β-Alanine, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 230314-63-3 CAPLUS

CN Acetamide, 2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ || \\ CH_2 - NH - CH_2 - C - NH_2 \\ \end{array}$$

RN 230314-64-4 CAPLUS

CN Acetamide, 2-[[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & O \\ \hline \\ O & & \\ \hline \\ O & & \\ CH_2-CH_2-NH-CH_2-C-NH_2 \\ \hline \end{array}$$

RN 230314-84-8 CAPLUS

CN Methanesulfonamide, N-[2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & O \\ \hline \\ O & \\ CH_2 - NH - CH_2 - CH_2 - NH - S - Me \\ \hline \\ O & \\ \end{array}$$

•2 HCl

RN 230314-85-9 CAPLUS

CN Methanesulfonamide, N-[3-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 230314-86-0 CAPLUS

CN Methanesulfonamide, N-[2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]methylamino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{O} \\ & \text{I} & \text{II} \\ & \text{CH}_2-\text{N-CH}_2-\text{CH}_2-\text{NH-S-Me} \\ & \text{II} \\ & \text{O} \\ \end{array}$$

RN 230314-87-1 CAPLUS

CN Methanesulfonamide, N-[2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]propylamino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ CH_2-CH_2-NH-S-Me \\ & & & \\ &$$

RN 230314-89-3 CAPLUS

CN Methanesulfonamide, N-[2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]hexylamino]ethyl]-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 230314-88-2 CMF C24 H41 N3 O4 S

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ \text{CH}_2-\text{CH}_2-\text{NH}-\text{S}-\text{Me} \\ & & & \\ & & & \\ \hline \\ \text{O} & & & \\ \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 230314-90-6 CAPLUS

CN Methanesulfonamide, N-[2-[[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]amino]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & O \\ \hline \\ O & & \\ CH_2-CH_2-NH-CH_2-CH_2-NH-S-Me \\ \hline \\ O & & \\ \end{array}$$

●2 HCl

RN 230315-15-8 CAPLUS

CN Methanesulfonamide, N-[2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]ethyl]-N-methyl-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 230315-14-7 CMF C19 H31 N3 O4 S

$$O = \begin{array}{c} O \\ | \\ | \\ | \\ CH_2 - NH - CH_2 - CH_2 - N - Me \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 230315-16-9 CAPLUS

CN Methanesulfonamide, N-[2-[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]methylamino]ethyl]-N-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{O} = \begin{array}{c} \text{O} \\ \text{S-Me} \\ \text{O} \end{array}$$

●2 HCl

IT 89483-75-0

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of arylamino aliphatic acid derivs.)

RN 89483-75-0 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

IT 230315-44-3P 230315-53-4P 230315-54-5P

230315-55-6P 230315-71-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of arylamino aliphatic acid derivs.)

RN 230315-44-3 CAPLUS

CN 4-Piperidineethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-31-2 CMF C16 H24 N2 O2

$$\begin{array}{c|c} CH_2-CH_2-NH_2 \\ \hline \\ O \\ CH_2-N \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 230315-53-4 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{CH}_2-\text{NHMe} \\ \hline \\ & & \text{CH}_2-\text{N} \end{array}$$

•2 HCl

RN 230315-54-5 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-propyl-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-NHPr-n \\ \hline \\ CH_2-NHPr-n \\ \hline \end{array}$$

•2 HCl

RN 230315-55-6 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-hexyl-, dihydrochloride (9CI) (CA INDEX NAME)

$$CH_2-NH-(CH_2)_5-Me$$

•2 HCl

RN 230315-71-6 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-NH-CH_2-Ph \\ \hline \\ CH_2-NH-CH_2-Ph \\ \hline \\ \end{array}$$

L6 ANSWER 11 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:499944 CAPLUS

DOCUMENT NUMBER:

131:280998

TITLE:

N-Substituted (2,3-Dihydro-1,4-benzodioxin-2-

yl) methylamine Derivatives as D2 Antagonists/5-HT1A

Page 142

Partial Agonists with Potential as Atypical

Antipsychotic Agents

AUTHOR(S): Birch, Alan M.; Bradley, Paul A.; Gill, Julie C.;

Kerrigan, Frank; Needham, Pat L.

CORPORATE SOURCE: Research and Development Department, Knoll

Pharmaceuticals, Nottingham, NG1 1GF, UK

SOURCE: Journal of Medicinal Chemistry (1999), 42(17),

3342-3355

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:280998

GI

As series of N-substituted 1-(2,3-dihydro-1,4-benzodioxin-2-yl) methylamine derivs. with D2 antagonist/5-HT1A partial agonist activity has been prepared as potential atypical antipsychotic agents. Optimization of in vitro receptor binding activity and in vivo activity in rodent models of psychosis has led to a compound (I) which showed good affinities for human D2, D3, and 5-HT1A receptors but significantly less affinity for human α1 adrenoceptors and rat H1 and muscarinic receptors. In rodents, I showed functional D2-like antagonism and 5-HT1A partial agonism. After oral dosing, I showed good activity in rodent antipsychotic tests and very little potential to cause extrapyramidal side effects (EPS), as measured by its ability to induce catalepsy in rats only at very high doses. In the light of this promising profile of activity, I has been selected for clin. investigation as a novel antipsychotic agent with a predicted low propensity to cause EPS.

IT 170352-82-6P 246265-92-9P 246265-93-0P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(N-substituted (dihydrobenzodioxinyl)methylamine derivs. as D2 antagonists/5-HT1A partial agonists with potential as atypical antipsychotic agents in relation to affinity for $\alpha 1$ adrenoceptors)

RN 170352-82-6 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-(2-methoxyphenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 170352-81-5 CMF C22 H28 N2 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 246265-92-9 CAPLUS

CN 2-Pyrimidinamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

RN 246265-93-0 CAPLUS

CN 2-Pyrimidinamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

IT 246266-07-9P 246266-08-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(N-substituted (dihydrobenzodioxinyl) methylamine derivs. as D2 antagonists/5-HT1A partial agonists with potential as atypical antipsychotic agents in relation to affinity for α 1 adrenoceptors)

RN 246266-07-9 CAPLUS

CN Phenol, 4-chloro-2-[[[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]imino]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} OH \\ CH_2-N = CH \\ C1 \end{array}$$

RN 246266-08-0 CAPLUS

CN 2-Pyrimidinamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:485058 CAPLUS

DOCUMENT NUMBER:

129:109093

TITLE:

Preparation of heteroarylsulfonamides as 5-HT1A and/or

D2-like receptor ligands.

INVENTOR(S):

Birch, Alan Martin; Bradley, Paul Anthony Knoll A.-G. Chemische Fabriken, Germany

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 9829415	A1 19980709	WO 1997-EP7035	19971215			
W: AL, AU, B	G, BR, BY, CA, CN,	CZ, GE, HU, ID, IL, J	JP, KR, KZ, LT,			
		SG, SI, SK, TR, UA, U				
•	O, RU, TJ, TM					
		FR, GB, GR, IE, IT, I	JU, MC, NL, PT, SE			
		AU 1998-58568				
		EP 1997-954403				
EP 948499	B1 20050302					
R: DE, FR, G						
JP 2001508420	•	JP 1998-529575	19971215			
		US 1999-331064	19990616			
PRIORITY APPLN. INFO.:	21 200201	GB 1996-27005	A 19961227			
INIONIII INI EN. INIO		WO 1997-EP7035				
OTHER SOURCE(S):	MARPAT 129:1090					

$$G^2 \cdot G^3$$
 G^1
 A
 B
 R^2
 QSO_2T
 R^3
 R^3
 R^3

Title compds. [I; A, B = CH2, O; G1G2G3 = NR'CR'':N, ON:CR'', OC(R')2O, AB SCR'':N, etc.; R' = H, alkyl; R'' = H, halo, alkyl, haloalkyl, CO2H, alkanoyl, alkoxycarbonyl, carbamoyl, etc.; R1 = alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio; R2-R4 = H, alkyl; n = 0, 1, 2; U = (alkyl-substituted) alkylene; Q = specified divalent group containing N atoms; T = (substituted) aryl, heteroaryl], were prepared Thus, N-[(1-tert-butoxycarbonylpiperid-4-yl)methyl]pyridine-2-sulfonamide in CH2Cl2 was treated with CF3CO2H, to give a residue which was refluxed with (S)-9-chloro-2,3-dihydrothieno[1,4]benzodioxin-2-ylmethyl tosylate (preparation given) and K2CO3 in MeCN to give (S)-N-[[1-(9-chloro-2,3-dihydrothieno[3,2f][1,4]benzodioxin-2-ylmethyl)piperid-4-yl]methyl]pyridine-2-sulfonamide. IT 210042-92-5P 210042-93-6P 210042-94-7P 210042-95-8P 210042-97-0P 210042-98-1P 210042-99-2P 210043-00-8P 210043-18-8P 210043-19-9P 210043-20-2P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of heteroarylsulfonamides as 5-HT1A and/or D2-like receptor ligands) 210042-92-5 CAPLUS RN 2-Pyridinesulfonamide, N-[[1-[(9-chloro-2,3-dihydrothieno[3,2-f]-1,4-CN benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 210042-93-6 CAPLUS

CN 2-Pyridinesulfonamide, N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 210042-94-7 CAPLUS

CN Acetamide, N-[4-[[[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 210042-95-8 CAPLUS

CN 2-Pyridinesulfonamide, N-[[1-[(2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-y1)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 210042-97-0 CAPLUS
CN 3-Pyridinesulfonamide, N-[[1-[(2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 210042-98-1 CAPLUS

CN Benzenesulfonamide, 2,3-dichloro-N-[[1-[(2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 210042-99-2 CAPLUS

CN Benzenesulfonamide, N-[[1-[(2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,4-difluoro- (9CI) (CA INDEX NAME)

RN

210043-00-8 CAPLUS
Acetamide, N-[4-[[[[1-[(2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX CNNAME)

RN 210043-18-8 CAPLUS
CN 2-Pyridinesulfonamide, N-[[1-[[(2S)-9-chloro-2,3-dihydrothieno[3,2-f]-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 210043-19-9 CAPLUS

CN 2-Pyridinesulfonamide, N-[[1-[[(2S)-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210043-20-2 CAPLUS

CN Acetamide, N-[4-[[[[1-[[(2S)-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl]methyl]-4-piperidinyl]methyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

3

ACCESSION NUMBER: 1998:485055 CAPLUS

DOCUMENT NUMBER: 129:109092

TITLE: Preparation of benzodioxanylmethylpiperidylmethylpyrid

inesulfonamides and related compounds having 5-HT1A

and/or D2-like activity.

INVENTOR(S): Wishart, Neil; Birch, Alan Martin

PATENT ASSIGNEE(S): Knoll A.-G. Chemische Fabriken, Germany

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

GI

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

							DATE		APPLICATION NO.				DATE					
						WO 1997-EP7034				19971215								
							CA,											
							RO,											
					RU,						•	•	•	•	Ţ	•	•	
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							CA 1997-2275668											
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EP									EP 1997-953819									
	R:	AT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI	, RO											
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	9714						2000											
	JP 2001508419					2001												
	ZA 9711551			Ā			ZA 1997-11551											
	6136				A		2000											
		-										5997				9990		
	9905						2000				-						-	
NO	9903	172			Α		1999	0625		-		3172						
PRIORITY	CIORITY APPLN. INFO.:											2700						
										WO 1	.997-	EP70	34		W 1	9971	215	
OTHER SO	HER SOURCE(S):			MAR	TAG	129:	1090	92							•			

$$(R^1)_n$$

$$R^2$$

$$UQSO_2T$$

$$R^3$$

Title compds. [I; A, B = CH2, O; n = 0-4; U = (alkyl-substituted) AB alkylene; Q specified divalent group containing N atoms; T = (substituted) Ph, naphthyl, pyridyl, pyrimidinyl, isoxazolyl, oxazolyl, tetrazolyl,
isothiazolyl, etc.; R1 = alkyl, haloalkyl, alkoxy, haloalkoxy, halo, etc.; R2 = H, alkyl, alkoxy; R3, R4 = H, alkyl], were prepared Thus, N-(4-piperidinylmethyl)pyridine-2-sulfonamide trifluoroacetate (preparation given) was refluxed with (R)-7-chloro-1,4-benzodioxan-2-ylmethyl tosylate, K2CO3, and KI in MeCN to give (S)-N-[[1-(7-chloro-1,4-benzodioxan-2ylmethyl)-4-piperidyl]methyl]pyridine-2-sulfonamide hydrochloride. The latter showed Ki = 86.8 nM for inhibition of 3H-8-OH-DPAT binding to 5-HT1A receptors. IT210038-63-4P 210038-65-6P 210038-66-7P 210038-67-8P 210038-68-9P 210038-69-0P 210038-70-3P 210038-71-4P 210038-72-5P 210038-73-6P 210038-74-7P 210038-75-8P

210038-67-8P 210038-68-9P 210038-69-0P 210038-70-3P 210038-71-4P 210038-72-5P 210038-73-6P 210038-74-7P 210038-75-8P 210038-76-9P 210038-77-0P 210038-78-1P 210038-79-2P 210038-80-5P 210038-81-6P 210038-85-0P 210038-83-8P 210038-84-9P 210038-85-0P 210038-86-1P 210038-87-2P 210038-88-3P 210038-89-4P 210038-91-8P 210038-93-0P 210038-95-2P 210039-02-4P 210039-03-5P 210039-04-6P 210039-05-7P 210039-06-8P 210039-07-9P 210039-08-0P 210039-09-1P 210039-10-4P 210039-11-5P

CN

210039-12-6P 210039-13-7P 210039-14-8P 210039-15-9P 210039-16-0P 210039-18-2P 210039-25-1P 210039-27-3P 210039-25-1P 210039-33-1P 210039-35-3P 210039-37-5P 210039-38-6P 210039-39-7P 210039-41-1P 210039-43-3P 210039-45-5P 210039-47-7P 210039-49-9P 210039-50-2P 210039-51-3P 210039-52-4P 210039-56-8P 210039-57-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzodioxanylmethylpiperidylmethylpyridinesulfonamides and related compds. having 5-HT1A and/or D2-like activity)

RN 210038-63-4 CAPLUS

2-Pyridinesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 210038-65-6 CAPLUS

CN 3-Pyridinesulfonamide, N-[{1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 210038-66-7 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-nitro- (9CI) (CA INDEX NAME)

RN 210038-67-8 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 210038-68-9 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3,4-dimethoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

RN 210038-69-0 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,4-difluoro-(9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow F$$

RN 210038-70-3 CAPLUS

CN Acetamide, N-[4-[[[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 210038-71-4 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methoxy- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2 $NH-S$ OMe OMe

RN 210038-72-5 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,6-difluoro-(9CI) (CA INDEX NAME)

RN 210038-73-6 CAPLUS

CN Benzenesulfonamide, 4-chloro-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 210038-74-7 CAPLUS

CN 2-Pyridinesulfonamide, N-[[1-[[2,3-dihydro-7-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$F_3C$$
 CH_2 N N N

RN 210038-75-8 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,3-dichloro-(9CI) (CA INDEX NAME)

Br
$$CH_2 - NH - S$$
 $C1$

RN 210038-76-9 CAPLUS

CN Benzenesulfonamide, 2,3-dichloro-N-[[1-[[2,3-dihydro-7-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$F_3C \longrightarrow CH_2 - NH - S \longrightarrow C1$$

RN 210038-77-0 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,4-dinitro-(9CI) (CA INDEX NAME)

RN 210038-78-1 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,5-bis(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F_3C-CH_2-O \\ \hline \\ CH_2-NH-S \\ \hline \\ O \\ O-CH_2-CF_3 \\ \end{array}$$

RN 210038-79-2 CAPLUS

CN Benzenesulfonamide, 2-chloro-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 210038-80-5 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-iodo- (9CI) (CA INDEX NAME)

RN 210038-81-6 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methoxy-2,3,6-trimethyl- (9CI) (CA INDEX NAME)

C1
$$CH_2-NH-S$$
 Me Me Me Me

RN 210038-82-7 CAPLUS

CN Naphth[2,1-d]-1,2,3-oxadiazole-5-sulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 210038-83-8 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,4,6-trimethyl- (9CI) (CA INDEX NAME)

RN 210038-84-9 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,3,4,5,6-pentamethyl- (9CI) (CA INDEX NAME)

RN 210038-85-0 CAPLUS

CN 1-Naphthalenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5-(diethylamino)- (9CI) (CA INDEX NAME)

RN 210038-86-1 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 210038-87-2 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-nitro- (9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow NO_2$$

RN 210038-88-3 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methyl-3,5-dinitro- (9CI) (CA INDEX NAME)

RN 210038-89-4 CAPLUS

CN Benzenesulfonamide, 5-chloro-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-methoxy- (9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow OMe$$

RN 210038-91-8 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

$$C1$$
 O
 CH_2
 O
 CH_2
 O
 CH_2
 O
 O
 CH_3

RN 210038-93-0 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 210038-95-2 CAPLUS

CN 2-Naphthalenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow 0$$

RN 210038-97-4 CAPLUS

CN 1-Naphthalenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$C1$$
 $CH_2-NH-S=0$
 $CH_2-NH-S=0$

RN 210038-99-6 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,5-dimethoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{C1} & \text{OMe} \\ \hline \\ \text{C1} & \text{CH}_2 - \text{NH} - \text{S} \\ \hline \\ \text{O} & \text{OMe} \\ \end{array}$$

RN 210039-01-3 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C2 & CH_2 - NH - S \\ \hline \\ C3 & CH_2 - NH - S \\ \hline \\ C4 & CH_2 - NH - S \\ \hline \\ C5 & CH_2 - NH - S \\ \hline \\ C6 & CH_2 - NH - S \\ \hline \\ C7 & CH_2 - NH - S \\ \hline \\ C8 & CH_2 - NH - S \\ \hline \\ C9 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C2 & CH_2 - NH - S \\ \hline \\ C3 & CH_2 - NH - S \\ \hline \\ C4 & CH_2 - NH - S \\ \hline \\ C5 & CH_2 - NH - S \\ \hline \\ C6 & CH_2 - NH - S \\ \hline \\ C7 & CH_2 - NH - S \\ \hline \\ C8 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C2 & CH_2 - NH - S \\ \hline \\ C3 & CH_2 - NH - S \\ \hline \\ C4 & CH_2 - NH - S \\ \hline \\ C5 & CH_2 - NH - S \\ \hline \\ C5 & CH_2 - NH - S \\ \hline \\ C6 & CH_2 - NH - S \\ \hline \\ C7 & CH_2 -$$

RN 210039-02-4 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
CH_2-NH-S-Ph \\
CH_2-NH-S-Ph \\
0
\end{array}$$

RN 210039-03-5 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-5-fluoro-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & & \\ \hline \\ CH_2 - NH - S \\ \hline \\ O & Me \\ \end{array}$$

RN 210039-04-6 CAPLUS

CN Benzenesulfonamide, 2,5-dibromo-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 210039-05-7 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-nitro- (9CI) (CA INDEX NAME)

RN 210039-06-8 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,3,4-trifluoro-(9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow F$$

RN 210039-07-9 CAPLUS

CN Benzenesulfonamide, 2,5-dibromo-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3,6-difluoro- (9CI) (CA INDEX NAME)

RN 210039-08-0 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-fluoro- (9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow CH_2 -$$

RN 210039-09-1 CAPLUS

CN Benzenesulfonamide, 2-chloro-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow CH_2 - NH - S \longrightarrow 0$$

RN 210039-10-4 CAPLUS

CN Benzenesulfonamide, 3-chloro-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-fluoro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & C1 \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C1 & CH_2 - NH - S \\ \hline \\ C2 & CH_2 - NH - S \\ \hline \\ C3 & CH_2 - NH - S \\ \hline \\ C4 & CH_2 - NH - S \\ \hline \\ C5 & CH_2 - NH - S \\ \hline \\ C6 & CH_2 - NH - S \\ \hline \\ C7 & CH_2 - NH - S \\ \hline$$

RN 210039-11-5 CAPLUS

CN Benzenesulfonamide, 2,3-dichloro-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$C1 \longrightarrow CH_2 - NH - S \longrightarrow C1$$

RN 210039-12-6 CAPLUS

CN Acetamide, N-[4-[[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 210039-13-7 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-fluoro- (9CI) (CA INDEX NAME)

RN 210039-14-8 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-chloro- (9CI) (CA INDEX NAME)

RN 210039-15-9 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2,4-difluoro-(9CI) (CA INDEX NAME)

RN 210039-16-0 CAPLUS

CN Benzenesulfonamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-chloro-4-fluoro- (9CI) (CA INDEX NAME)

RN 210039-18-2 CAPLUS

CN Benzenesulfonamide, 2,3-dichloro-N-[[1-[(6,7-dihydro-1,3-dioxolo[4,5-g][1,4]benzodioxin-6-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O & CH_2 - NH - S \\ \hline O & CH_2 - NH - S \\ \hline O & C1 \\ \end{array}$$

RN 210039-20-6 CAPLUS

CN 2-Pyridinesulfonamide, N-[[1-[((2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● HCl

RN 210039-25-1 CAPLUS

CN 3-Pyridinesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-27-3 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-4-nitro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-29-5 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-31-9 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-3,4-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-33-1 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2,4-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-35-3 CAPLUS

CN Acetamide, N-[4-[[[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-37-5 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-4-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-38-6 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2,6-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-39-7 CAPLUS

CN Benzenesulfonamide, 4-chloro-N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-41-1 CAPLUS -

CN 2-Pyridinesulfonamide, N-[[1-[[(2S)-2,3-dihydro-7-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-43-3 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2,3-dichloro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

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RN 210039-45-5 CAPLUS

CN Benzenesulfonamide, 2,3-dichloro-N-[[1-[[(2S)-2,3-dihydro-7-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-47-7 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-49-9 CAPLUS

CN Benzenesulfonamide, 2-chloro-N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-50-2 CAPLUS

CN Benzenesulfonamide, 3-chloro-N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-51-3 CAPLUS

CN Benzenesulfonamide, 2,3-dichloro-N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-52-4 CAPLUS

CN Acetamide, N-[4-[[[[1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-53-5 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-54-6 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2-chloro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-55-7 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2,4-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-56-8 CAPLUS

CN Benzenesulfonamide, N-[[1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-3-chloro-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 210039-57-9 CAPLUS

CN Benzenesulfonamide, 2,3-dichloro-N-[[1-[[(6S)-6,7-dihydro-1,3-dioxolo[4,5-g][1,4]benzodioxin-6-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 187543-43-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzodioxanylmethylpiperidylmethylpyridinesulfonamides and related compds. having 5-HT1A and/or D2-like activity)

RN 187543-43-7 CAPLUS

CN 4-Piperidinemethanamine, 1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 210039-63-7P 210039-64-8P 210039-70-6P

210039-71-7P 210039-72-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzodioxanylmethylpiperidylmethylpyridinesulfonamides and related compds. having 5-HT1A and/or D2-like activity)

RN 210039-63-7 CAPLUS

CN 4-Piperidinemethanamine, 1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-N-(phenylmethylene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 210039-64-8 CAPLUS

CN 4-Piperidinemethanamine, 1-[[(2S)-7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 210039-70-6 CAPLUS

CN 4-Piperidinemethanamine, 1-[[(2S)-2,3-dihydro-7-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-N-(phenylmethylene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 210039-71-7 CAPLUS

CN 4-Piperidinemethanamine, 1-[[(2S)-2,3-dihydro-7-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 210039-72-8 CAPLUS

CN 4-Piperidinemethanamine, 1-[[(6S)-6,7-dihydro-1,3-dioxolo[4,5-q][1,4]benzodioxin-6-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:71134 CAPLUS

DOCUMENT NUMBER: 128:128024

TITLE: Preparation of benzodioxanes and 1(2H)-benzopyrans as

 α 2 adrenergic antagonists

INVENTOR(S): Vidaluc, Jean-Louis; Imbert, Thierry; Marien, Marc;

Briley, Michael

PATENT ASSIGNEE(S): Pierre Fabre Medicament, Fr.; Vidaluc, Jean-Louis;

Imbert, Thierry; Marien, Marc; Briley, Michael

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 9802435	A1 19980122	WO 1997-FR1217	19970707			
W: AU, BR, CA	, CN, JP, KR, MX,	NZ, US				
RW: AT, BE, CH	DE, DK, ES, FI,	FR, GB, GR, IE, IT,	LU, MC, NL, PT, SE			
FR 2750991	A1 19980116	FR 1996-8729	19960712			
AU 9735480	A1 19980209	AU 1997-35480	19970707			
PRIORITY APPLN. INFO.:		FR 1996-8729	A 19960712			
		WO 1997-FR1217	W 19970707			
		- 4				

OTHER SOURCE(S): MARPAT 128:128024

GΙ

yl) methyl, (2,3-dihydrobenzofuran-2-yl) methyl, (benzofuran-2-yl) methyl, [(2H)-benzopyran-3-yl]methyl, (3,4-dihydro-(2H)-benzopyran-3-yl)methyl, (3,4-dihydro-(2H)-1-benzopyran-3-yl)methyl; R2, R3, R4 = H, C1-4 alkyl, aryl, heteroaryl, aralkyl, naphthyl] were prepared as $\alpha 2$ adrenergic antagonists. E.g., reaction of 4-piperidineacetonitrile and 2-hydroxymethyl-1,4-benzodioxane tosylate, followed by reduction with LiAlH4 and reaction with PhNCO, gave 1-[2-[1-(1,4-benzodioxan-2-yl)methyl-4piperidinyl]ethyl]-3-phenylurea. IT 202002-17-3P 202002-19-5P 202002-20-8P 202002-21-9P 202002-22-0P 202002-24-2P 202002-25-3P 202002-26-4P 202002-27-5P 202002-28-6P 202002-29-7P 202002-30-0P 202002-31-1P 202002-32-2P 202002-33-3P 202002-34-4P 202002-35-5P 202002-36-6P 202002-37-7P 202002-38-8P 202002-39-9P 202002-40-2P 202002-41-3P 202002-42-4P 202002-43-5P 202002-44-6P 202002-45-7P 202002-46-8P 202002-47-9P 202002-48-0P 202002-49-1P 202002-50-4P 202002-51-5P 202002-52-6P 202002-53-7P 202002-54-8P 202002-55-9P 202002-56-0P 202002-57-1P 202002-65-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzodioxanes and benzopyrans as α2 adrenergic antagonists) 202002-17-3 CAPLUS RN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-CN piperidinyl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \\ \bigcirc \\ O \\ \end{array} \begin{array}{c} CH_2 - CH_2 - NH - C - NHPh \\ \end{array}$$

RN 202002-19-5 CAPLUS
CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]ethyl]-N-methyl-N'-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me O} \\ & \parallel \\ & \parallel \\ \text{CH}_2-\text{CH}_2-\text{N-C-NHPh} \\ \\ \hline \\ \text{O} \end{array}$$

RN 202002-20-8 CAPLUS
CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4 piperidinyl]ethyl]-N-methyl-N'-phenyl-, (2E)-2-butenedioate (1:1) (9CI)
 (CA INDEX NAME)

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CRN 202002-19-5

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CMF C24 H31 N3 O3

$$\begin{array}{c|c} & \text{Me O} \\ & \parallel \\ & \parallel \\ & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{N--}\text{C--}\text{NHPh} \\ \\ & \text{O} \\ & \parallel \\ & \text{CH}_2\text{--}\text{CH}_2\text{---}\text{N--}\text{C--}\text{NHPh} \\ \\ & \text{O} \\ & \parallel \\ & \text{CH}_2\text{---}\text{CH}_2\text{---}\text{N---}\text{C---}\text{NHPh} \\ \\ & \text{O} \\ & \text{CH}_2\text{----}\text{CH}_2\text{----}\text{N---}\text{C----}\text{NHPh} \\ \\ & \text{O} \\ & \text{CH}_2\text{----}\text{CH}_2\text{----}\text{N----}\text{C----}\text{NHPh} \\ \\ & \text{O} \\ & \text$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 202002-21-9 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N-methyl-N-phenyl- (9CI) (CA INDEX NAME)

RN 202002-22-0 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N-methyl-N-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-21-9 CMF C24 H31 N3 O3

$$\begin{array}{c|c} O & Ph \\ \parallel & \parallel \\ \hline \\ O & CH_2-CH_2-NH-C-N-Me \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-24-2 CAPLUS

Urea, N-(2,4-difluorophenyl)-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-23-1 CMF C23 H27 F2 N3 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-25-3 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N,N'-dimethyl-N'-phenyl- (9CI) (CA INDEX NAME)

RN 202002-26-4 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N,N'-dimethyl-N'-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-25-3 CMF C25 H33 N3 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-27-5 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-phenyl-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 202002-28-6 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N-phenyl-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ &$$

RN 202002-29-7 CAPLUS

Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N-phenyl-N-(phenylmethyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-28-6 CMF C30 H35 N3 O3 Page 179

$$CH_2-CH_2-NH-C-N-CH_2-Ph$$

$$CH_2-CH_2-NH-C-N-CH_2-Ph$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-30-0 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N,N-diphenyl- (9CI) (CA INDEX NAME)

RN 202002-31-1 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N,N-diphenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-30-0 CMF C29 H33 N3 O3

$$\begin{array}{c} O \\ \parallel \\ CH_2-CH_2-NH-C-NPh_2 \\ \hline \\ O \end{array}$$

CM 2

CRN 144-62-7

Page 180

CMF C2 H2 O4

RN 202002-32-2 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \hline \\ & & \\ & & \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{Ph} \\ \\ \hline \\ & & \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{Ph} \\ \\ \end{array} \\ \end{array}$$

RN 202002-33-3 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-(phenylmethyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-32-2 CMF C24 H31 N3 O3

$$\begin{array}{c|c} O & & O \\ | \\ O & \\ CH_2 - CH_2 - NH - C - NH - CH_2 - Ph \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-34-4 CAPLUS

CN Urea, N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \parallel & \parallel \\ \hline O & CH_2-CH_2-NH-C-NMe_2 \end{array}$$

RN 202002-35-5 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \hline \\ O & CH_2-CH_2-NH-C-NH \end{array}$$

RN 202002-36-6 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]ethyl]-N'-(4-methoxyphenyl)-, ethanedioate (1:1) (9CI) (CA
INDEX NAME)

CM 1

CRN 202002-35-5 CMF C24 H31 N3 O4

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-37-7 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-(4-nitrophenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O & O \\ \hline O & CH_2 - CH_2 - NH - C - NH \end{array}$$

RN 202002-38-8 CAPLUS

Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]ethyl]-N'-(4-nitrophenyl)-, ethanedioate (1:1) (9CI) (CA
INDEX NAME)

CM 1

CRN 202002-37-7 CMF C23 H28 N4 O5

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-39-9 CAPLUS

CN Urea, N-(2-chlorophenyl)-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

RN 202002-40-2 CAPLUS

Urea, N-(2-chlorophenyl)-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-39-9 CMF C23 H28 Cl N3 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-41-3 CAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 202002-42-4 CAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-41-3 CMF C23 H28 Cl N3 O3

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

CM 2

CRN 144-62-7 CMF C2 H2 O4 Page 184

RN 202002-43-5 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

RN 202002-44-6 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2 - Ph \\ \hline \\ O & CH_2 - NH - C - NH \\ \hline \end{array}$$

RN 202002-45-7 CAPLUS

CM 1

CRN 202002-44-6 CMF C30 H35 N3 O4

$$\begin{array}{c} O \\ O \\ CH_2 - CH_2 - NH - C - NH \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-46-8 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-1-naphthalenyl- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-NH-C=0$$

RN 202002-47-9 CAPLUS

Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-1-naphthalenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-46-8 CMF C27 H31 N3 O3

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-48-0 CAPLUS

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CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-2-naphthalenyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$
 CH₂- CH₂- NH- C- NH- C-

HCl

RN 202002-49-1 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-methyl- (9CI) (CA INDEX NAME)

RN 202002-50-4 CAPLUS

CN Urea, N-cyclohexyl-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ \hline \\ CH_2 - CH_2 - CH_2 - NH - C - NH \\ \hline \end{array}$$

RN 202002-51-5 CAPLUS

CN Urea, N-cyclohexyl-N'-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-50-4 CMF C23 H35 N3 O3

$$\begin{array}{c|c} O & & O \\ \hline O & CH_2 - CH_2 - CH_2 - NH - C - NH \\ \hline \end{array}$$

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CRN 144-62-7 CMF C2 H2 O4

RN 202002-52-6 CAPLUS

CN Benzamide, N-[[[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \parallel & \parallel \\ CH_2-CH_2-NH-C-NH-C-Ph \end{array}$$

RN 202002-53-7 CAPLUS

CN Benzamide, N-[[[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]amino]carbonyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-52-6 CMF C24 H29 N3 O4

$$\begin{array}{c|c} O & O \\ \parallel & \parallel \\ CH_2-CH_2-NH-C-NH-C-Ph \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-54-8 CAPLUS

CN 1(2H)-Quinolinecarboxamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3,4-dihydro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$
 CH₂-CH₂-NH-C=0

RN 202002-55-9 CAPLUS

CN 1(2H)-Quinolinecarboxamide, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3,4-dihydro-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-54-8 CMF C26 H33 N3 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 202002-56-0 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-2-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \hline O & CH_2-CH_2-NH-C-NHPh \\ \hline \\ Me & \end{array}$$

RN 202002-57-1 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-2-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-56-0 CMF C24 H31 N3 O3

$$\begin{array}{c} O \\ \parallel \\ CH_2 - CH_2 - NH - C - NHPh \\ \end{array}$$
Me

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 202002-65-1 CAPLUS

CN Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-N'-2-naphthalenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$
 CH₂-CH₂-NH-C-NH

IT 194612-30-1P 194612-31-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzodioxanes and benzopyrans as $\alpha 2$ adrenergic antagonists)

RN 194612-30-1 CAPLUS

CN 4-Piperidineacetonitrile, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

$$O$$
 CH_2 N CH_2 CN

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Page 190
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RN 194612-31-2 CAPLUS

CN 4-Piperidineethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-(9CI) (CA INDEX NAME)

IT 202002-18-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzodioxanes and 27 benzopyrans as α 2 adrenergic

antagonists)

RN 202002-18-4 CAPLUS

Urea, N-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]ethyl]-N'-phenyl-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 202002-17-3 CMF C23 H29 N3 O3

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO₂C E CO₂H

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:717923 CAPLUS

DOCUMENT NUMBER: 128:3692

TITLE: Fused imidazopyridine derivatives as

antihyperlipidemic agents

INVENTOR(S): Takatani, Muneo; Shibouta, Yumiko; Sugiyama, Yasuo;

Kawamoto, Tetsuji

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 457 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

GΙ

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA	PATENT NO.					KIND		DATE		APPLICATION NO.					DATE		
WO.										WO 1997-JP1395							
							BB,										
							LC,										
							SI,										
							MD,										
	RW:						SZ,				CH,	DE,	DK,	ES,	FI,	FR,	GB,
		GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,	CG,	CI,	CM,	GΑ,	GN,
		ML,	MR,	NE,	SN,	TD,	TG										
CA	2251	625			AA		1997	1030	1	CA 1	1997-	2251	625		1	9970	423
AU	AU 9724048				A1		1997	1112	AU 1997-24048					19970423			
JP	JP 10226689				A2		1998	0825	JP 1997-105625						1	9970	423
ZA	ZA 9703493				A 19981023			ZA 1997-3493					19970423				
EP 915888																	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,															
	1223						1999	0721								9970	
US	6235	731			B1		2001	0522			1998-					9981	
PRIORIT	Y APP	LN.	INFO	. :							1996-						
											1996-						
										WO 1	1997-	JP13	95	,	₩ 1	9970	423
OTHER SOURCE(S):				MAR	PAT	128:	3692										

Novel compds. I [wherein ring Q is optionally substituted; one of R0, R1, AΒ and R2 = -Y0-Z0, and the others = H, halo, (un) substituted OH, (un) substituted hydrocarbyl, or acyl; Y0 = bond, (un) substituted bivalent hydrocarbon group; Z0 = basic group which may be bonded via O, N, CO, CS, SO2N(R3) (where R3 = H or (un) substituted hydrocarbyl), or S(O)n (where n = 0, 1, or 2); dotted line = optional pi bond] and salts thereof are disclosed. The compds. have excellent LDL receptor up-regulating, blood lipid-lowering, blood sugar-lowering, and diabetic complicationameliorating activities. Examples include 178 synthetic examples, 79 reference examples, and biol. data for approx. 20 selected compds. For instance, Et 5-thia-1,8b-diazaacenaphthylene-4-carboxylate underwent a sequence of DIBAL reduction to an alc. (87%), oxidation to an aldehyde and Wittig-based homologation to an acrylic acid derivative (84%), amidation with 1-Boc-piperidin-4-ylmethylamine and deprotection (92%), N-alkylation with Ph(CH2)3Br (55%), and salification with methanolic HCl, to give the title compound II.2HCl. In hamsters, II.2HCl reduced non-HDL cholesterol to 62.3% of control, and triglycerides to 67.0% of control. IT

198891-44-0P 198892-98-7P 198892-99-8P 198893-00-4P 198893-48-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of fused imidazopyridine derivs. as antihyperlipidemic agents)

RN 198890-90-3 CAPLUS

Absolute stereochemistry.

●2 HCl

RN 198890-91-4 CAPLUS

CN 5-Thia-1,8b-diazaacenaphthylene-4-carboxamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, dihydrochloride, (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 198890-92-5 CAPLUS

CN 5-Thia-1,8b-diazaacenaphthylene-4-carboxamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 198891-44-0 CAPLUS

CN 5-Thia-1,8b-diazaacenaphthylene-4-carboxamide, N-[3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 198892-98-7 CAPLUS

CN 5-Thia-1,8b-diazaacenaphthylene-4-carboxamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 198892-99-8 CAPLUS

CN 5-Thia-1,8b-diazaacenaphthylene-4-carboxamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN198893-00-4 CAPLUS

5-Thia-1,8b-diazaacenaphthylene-4-carboxamide, N-[[1-[(2,3-dihydro-1,4-CN benzodioxin-2-y1)methy1]-4-piperidiny1]methy1]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

198893-48-0 CAPLUS RN

5-Thia-1,8b-diazaacenaphthylene-4-carboxamide, N-[3-[1-[(2,3-dihydro-1,4-CN benzodioxin-2-yl)methyl]-4-piperidinyl]propyl]- (9CI) (CA INDEX NAME)

ANSWER 16 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:533644 CAPLUS

DOCUMENT NUMBER: 127:205479

TITLE: Novel piperidine derivatives 4-substituted by an

imidazolidin-2-on-1-ylethyl, tetrahydropyrimidin-2-on-1-ylethyl, or 1,3-diazepin-2-on-1-ylethyl group, and

their use as $\alpha 2$ adrenergic receptor antagonists INVENTOR(S):

Vidaluc, Jean-Louis; Imbert, Thierry; Marien, Marc;

Briley, Michael

Pierre Fabre Medicament, Fr.; Vidaluc, Jean-Louis; PATENT ASSIGNEE(S):

Imbert, Thierry; Marien, Marc; Briley, Michael

PCT Int. Appl., 33 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KINI	DATE	APPLICATION NO.	DATE			
WO 9728157	Al	19970807	WO 1997-FR179	19970130			
W: AU,	BR, CA, CN,	JP, KR, MX,	NZ, US				
RW: AT,	BE, CH, DE,	DK, ES, FI,	FR, GB, GR, IE, IT,	LU, MC, NL, PT, SE			
FR 2744451	A1	19970808	FR 1996-1220	19960201			
FR 2744451	B1	19980424					
AU 9716061	A1	19970822	AU 1997-16061	19970130			
PRIORITY APPLN.	INFO.:		FR 1996-1220	A 19960201			
			WO 1997-FR179	W 19970130			
		405 0054	3.0				

OTHER SOURCE(S):

MARPAT 127:205479

GI

$$\begin{array}{c|c}
R^2 \\
N \\
N \\
N \\
R^4
\end{array}$$

AB Novel cyclic urea derivs. of 4-ethylpiperidine, having general formula I [R1 = (1,4-benzodioxan-2-yl)methyl, (2H-benzopyran-3-yl)methyl, or 4-(chromanone-2-yl)methyl; R2, R3 = H, or R2R3 = benzo fusion; R4 = H, C1-4 alkyl, (un)substituted aryl, heteroaryl, aralkyl, or naphthyl; n = 0-2], and their salts and preparation methods, are disclosed. The use of the compds. as drugs, pharmaceutical compns. containing them, and preparation methods

ΙI

for the compns. are also disclosed. The compds. are useful for treatment of a wide variety of medical conditions. For instance, N-alkylation of 4-(2-hydroxyethyl)piperidine by 2-(bromomethyl)-1,4-benzodioxane (69%), conversion of the product alc. to a chloride (94%) by SOCl2, and coupling of the latter with 1-phenyltetrahydro-2(1H)-pyrimidinone (69%) using NaH in AcNMe2, gave title compound II. In a test for inhibition of guanabenz-induced hypothermia in mice, II had an oral ED50 of 0.28 mg/kg, vs. 0.69 for idazoxan and 1.23 for yohimbine.

IT 194612-27-6P 194612-28-7P 194612-29-8P 194612-30-1P 194612-31-2P 194612-32-3P 194612-33-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of piperidine derivs. as $\alpha 2$ adrenergic antagonists)

RN 194612-27-6 CAPLUS

CN 4-Piperidineethanol, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CH_2-OH \\ \hline \\ CH_2-N \end{array}$$

RN 194612-28-7 CAPLUS

CN Piperidine, 4-(2-chloroethyl)-1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl](9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CH_2C1 \\ \hline \\ CH_2-N \end{array}$$

RN 194612-29-8 CAPLUS

CN Piperidine, 4-(2-chloroethyl)-1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, hydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CH_2C1 \\ \hline \\ CH_2-N \\ \hline \end{array}$$

● HCl

RN 194612-30-1 CAPLUS

CN 4-Piperidineacetonitrile, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl](9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CN \\ \hline \\ CH_2-N \end{array}$$

RN 194612-31-2 CAPLUS

CN 4-Piperidineethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl](9CI) (CA INDEX NAME)

RN 194612-32-3 CAPLUS

CN 4-Piperidineethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-[2-(4-nitrophenyl)ethyl]- (9CI) (CA INDEX NAME)

RN 194612-33-4 CAPLUS

CN 4-Piperidineethanamine, N-[2-(4-aminophenyl)ethyl]-1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

IT 194611-90-0P 194611-91-1P 194611-92-2P 194611-93-3P 194611-94-4P 194611-95-5P 194611-96-6P 194611-97-7P 194611-98-8P 194611-99-9P 194612-00-5P 194612-01-6P 194612-05-0P 194612-03-8P 194612-04-9P 194612-05-0P 194612-06-1P 194612-07-2P 194612-18-8P 194612-12-9P 194612-11-8P 194612-12-9P 194612-13-0P 194612-14-1P 194612-15-2P 194612-16-3P 194612-24-3P 194612-26-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine derivs. as $\alpha 2$ adrenergic antagonists)

RN 194611-90-0 CAPLUS

CN 2(1H)-Pyrimidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]tetrahydro-3-phenyl- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$
 Ph

RN 194611-91-1 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-phenyl- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$
 Ph

RN 194611-92-2 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-

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piperidinyl]ethyl]-3-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194611-91-1 CMF C25 H31 N3 O3

$$\begin{array}{c|c} O & CH_2 - CH_2 - N & N \end{array}$$

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 194611-93-3 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & \\ \hline \\ CH_2 - CH_2 - CH_2 - N \\ \hline \end{array}$$

RN 194611-94-4 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(phenylmethyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194611-93-3 CMF C26 H33 N3 O3

$$\begin{array}{c|c} O & & \\ \hline \\ CH_2 - CH_2 - CH_2 - N \\ \hline \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194611-95-5 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$

RN 194611-96-6 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194611-95-5 CMF C19 H27 N3 O3

$$CH_2-CH_2-N$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194611-97-7 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & \\ \hline \\ O & \\ CH_2 - \\ N \end{array} \begin{array}{c} CH_2 - CH_2 - \\ N \end{array} \begin{array}{c} O \\ N \end{array} \begin{array}{c} Me \\ \end{array}$$

RN 194611-98-8 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-methyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194611-97-7 CMF C20 H29 N3 O3

$$\begin{array}{c|c} O & & \\ \hline \\ O & \\ CH_2 - \\ N & \\ \end{array} \begin{array}{c} O \\ \\ CH_2 - \\ CH_2 - \\ \end{array} \begin{array}{c} O \\ \\ N & \\ \end{array} \begin{array}{c} O \\ \\ \end{array} \begin{array}{c} O \\ \\ \\ \end{array} \begin{array}{c} O \\ \\ \end{array} \begin{array}{c} O \\ \\ \\ \end{array} \begin{array}{c} O \\ \\ \end{array} \begin{array}{c} O \\ \\ \end{array} \begin{array}{c} O \\ \\ \\ \end{array} \begin{array}{c} O \\ \\$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194611-99-9 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2-phenylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$
 CH₂-CH₂-Ph

HCl

RN 194612-00-5 CAPLUS
CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$

RN 194612-01-6 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2 - CH_2 - CH_2 - N \end{array}$$

RN 194612-02-7 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(4-pyridinyl)- (9CI) (CA INDEX NAME)

$$CH_2 - CH_2 - N$$

RN 194612-03-8 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(4-pyridinyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-02-7 CMF C24 H30 N4 O3

$$\begin{array}{c|c} O & CH_2 - CH_2 - CH_2 - N \end{array}$$

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CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194612-04-9 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2,6-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \hline \\ O & CH_2 - CH_2 - CH_2 - N \\ \hline \\ MeO & MeO \\ \end{array}$$

RN 194612-05-0 CAPLUS

CN 2-Imidazolidinone, 1-(2,6-diethoxyphenyl)-3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$
OOEt

 CH_2-CH_2-N
EtO

RN 194612-06-1 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2,6-dimethylphenyl)- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$
 Me
 Me
 Me

RN 194612-07-2 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2,6-dimethylphenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

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CRN 194612-06-1 CMF C27 H35 N3 O3

$$\begin{array}{c|c} & & & \\ &$$

· CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194612-08-3 CAPLUS

CN 2-Imidazolidinone, 1-(2,6-dichlorophenyl)-3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ \end{array}$$

● HCl

RN 194612-09-4 CAPLUS

CN 2-Imidazolidinone, 1-[2,6-bis(1-methylethyl)phenyl]-3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ \hline \\ & & \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{N} \\ \\ & & \\ \end{array} \\ \begin{array}{c} \text{i-Pr} \\ \\ \text{i-Pr} \end{array}$$

RN 194612-10-7 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-

piperidinyl]ethyl]-3-(2,4,6-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 194612-11-8 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-ethyl-1,3-dihydro- (9CI) (CA INDEX NAME)

RN 194612-12-9 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-ethyl-1,3-dihydro-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-11-8 CMF C25 H31 N3 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 194612-13-0 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-1,3,4,5-tetrahydro- (9CI) (CA INDEX NAME)

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$$\begin{array}{c|c} CH_2-CH_2-N \\ \hline \\ O \\ \end{array}$$

RN 194612-14-1 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-1,3,4,5-tetrahydro-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-13-0 CMF C25 H31 N3 O3

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 194612-15-2 CAPLUS

CN 2(1H)-Quinazolinone, 3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3,4-dihydro-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2 - CH_2 - CH_2 - N \\ \hline \\ O \\ H \end{array}$$

RN 194612-16-3 CAPLUS

CN 2(1H)-Quinazolinone, 3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3,4-dihydro-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194612-15-2 CMF C24 H29 N3 O3

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 194612-24-3 CAPLUS

CN 2-Imidazolidinone, 1-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]-3-(2-phenylethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 194612-26-5 CAPLUS

CN 2-Imidazolidinone, 1-(2,6-dichlorophenyl)-3-[2-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CH_2-N & CH_2-CH_2-N & CI \\ \hline \\ CI & CI \\ \hline \end{array}$$

L6 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:506290 CAPLUS

DOCUMENT NUMBER: 127:135806

TITLE: Preparation of heteroarylcarboxamides as nervous

system agents

INVENTOR(S): Birch, Alan Martin; Bradley, Paul Anthony; Gill, Julie

Carolyn

PATENT ASSIGNEE(S): Knoll Aktiengesellschaft, Germany; Birch, Alan Martin;

Bradley, Paul Anthony; Gill, Julie Carolyn PCT Int. Appl., 51 pp.

SOURCE: PCT Int. Appl., 51 pp

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT NO.			KIND	DATE	APPLICATION NO.		DATE			
WO	9723485	,		A1	19970703	WO 1996-EP5637		19961216			
	W: AU	J, BG,	BR,	CA, C	N, CZ, GE,	HU, IL, JP, KR, LV,	MX,	NO, NZ,	PL,		
						US, AM, AZ, BY, KG,					
	RW: AT	BE,	CH,	DE, D	K, ES, FI,	FR, GB, GR, IE, IT,	LU,	MC, NL,	PT, SE		
AU	9711958	}		A1		AU 1997-11958					
EP	876372			A1	19981111	EP 1996-943129		199612	216		
EP	876372			B1	20020306	;					
	R: DE	FR,	GB,	ΙT							
JP	2000502	662		T2	20000307	JP 1997-523278		199612	16		
US	6107310)		Α	20000822	US 1998-91129		199806	16		
PRIORITY APPLN. INFO.:						GB 1995-26495	P	199512	223		
						WO 1996-EP5637	W	N 199612	216		
OTHER SC	NIRCE (S)	-		MARPA	T 127:1358	306					

OTHER SOURCE(S):

MARPAT 127:135806

GΙ

Title compds. [I; R = Z3Z4R8; R1 = 1 or 2 of H, halo, alkyl, alkoxy, etc.; AB R2 = H, alkyl, alkoxy; R3,R4 = H or alkyl; R6R7 = (un)substituted NHCH:CH, -N:CHNH, -NHCH:N, etc.; R8 = (un) substituted heteroarylcarbonyl; Z1,Z2 = 0 or CH2; Z3 = alkylene; Z4 = NR5Z5Z6, Z6Z5NR5, etc.; R5 = H or alkyl; Z5 = alkylene; Z6 = N-attached heterocyclylene] were prepared as 5-HT1A and/or α l and/or D2-like receptor ligands. Thus, Et 4-formyl-5hydroxyindole-2-carboxylate was etherified by (R)-glycidyl tosylate and the product converted in 6 steps to title compound II. Data for biol. activity of I were given.

193197-22-7P 193197-23-8P 193197-24-9P IT 193197-25-0P 193197-26-1P.193197-27-2P 193197-28-3P 193197-29-4P 193197-30-7P 193197-31-8P 193197-32-9P 193197-33-0P 193197-34-1P 193197-35-2P 193197-36-3P 193197-37-4P 193197-38-5P 193197-39-6P 193197-40-9P 193197-41-0P 193197-42-1P 193197-43-2P 193197-44-3P 193197-45-4P 193197-46-5P 193197-47-6P 193197-48-7P 193197-49-8P 193197-50-1P 193197-51-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heteroarylcarboxamides as nervous system agents)
RN 193197-22-7 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 193197-23-8 CAPLUS

CN 2-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 193197-24-9 CAPLUS

CN 2-Pyridinecarboxamide, N-[[1-[[(2S)-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl]methyl]-4-piperidinyl]methyl]-, (2E)-2-butenedioate (10:13) (9CI) (CA INDEX NAME)

CM 1

CRN 193197-23-8 CMF C23 H26 N4 O3

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 193197-25-0 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

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RN 193197-26-1 CAPLUS

CN 2-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

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PAGE 2-A

RN 193197-27-2 CAPLUS

CN 7H-1,4-Dioxino[2,3-e]indole-8-carboxylic acid, 2,3-dihydro-2-[[4-[[(2-pyridinylcarbonyl)amino]methyl]-1-piperidinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN193197-28-3 CAPLUS

7H-1,4-Dioxino[2,3-e]indole-8-carboxylic acid, 2,3-dihydro-2-[[4-[[(3-pyridinylcarbonyl)amino]methyl]-1-piperidinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME) CN

193197-29-4 CAPLUS RN

7H-1,4-Dioxino[2,3-e]indole-8-carboxylic acid, 2-[[4-[[[(2-amino-3-pyridinyl)carbonyl]amino]methyl]-1-piperidinyl]methyl]-2,3-dihydro-, ethyl ester (9CI) (CA INDEX NAME) CN

RN 193197-30-7 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole-8-carboxamide, 2,3-dihydro-2-[[4-[[(2-pyridinylcarbonyl)amino]methyl]-1-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 H_N

RN 193197-31-8 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole-8-carboxamide, 2,3-dihydro-2-[[4-[[(3-pyridinylcarbonyl)amino]methyl]-1-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 193197-32-9 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole-8-carboxamide, 2-[[4-[[[(2-amino-3-pyridinyl)carbonyl]amino]methyl]-1-piperidinyl]methyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 H_N

RN 193197-33-0 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole-8-carboxamide, 2,3-dihydro-N,N-dimethyl-2-[[4[((2-pyridinylcarbonyl)amino]methyl]-1-piperidinyl]methyl]- (9CI) (CA
INDEX NAME)

RN 193197-34-1 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole-8-carboxamide, 2,3-dihydro-N,N-dimethyl-2-[[4[[(3-pyridinylcarbonyl)amino]methyl]-1-piperidinyl]methyl]- (9CI) (CA
INDEX NAME)

RN 193197-35-2 CAPLUS

CN 7H-1,4-Dioxino[2,3-e]indole-8-carboxamide, 2-[[4-[[[(2-amino-3-pyridinyl)carbonyl]amino]methyl]-1-piperidinyl]methyl]-2,3-dihydro-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN

193197-36-3 CAPLUS
2-Pyridinecarboxamide, N-[[1-[(8-acetyl-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME) CN

RN 193197-37-4 CAPLUS

CN

3-Pyridinecarboxamide, N-[[1-[(8-acetyl-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 193197-38-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[[1-[(8-acetyl-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]-2-amino- (9CI) (CA INDEX NAME)

RN 193197-39-6 CAPLUS
CN 2-Pyridinecarboxamide, N-[[1-[(8-cyano-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN

CN

193197-40-9 CAPLUS
3-Pyridinecarboxamide, N-[[1-[(8-cyano-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 193197-41-0 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(8-cyano-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 193197-42-1 CAPLUS
CN 2-Pyridinecarboxamide, N-[[1-[(8-formyl-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

193197-43-2 CAPLUS RN3-Pyridinecarboxamide, N-[[1-[(8-formyl-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME) CN

RN 193197-44-3 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(8-formyl-2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 193197-45-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indol-2-yl)methyl]-4-piperidinyl]methyl]-2-methoxy- (9CI) (CA INDEX NAME)

RN 193197-46-5 CAPLUS
CN 2-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indazol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN

193197-47-6 CAPLUS
3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indazol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME) CN

RN 193197-48-7 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-7H-1,4-dioxino[2,3-e]indazol-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

193197-49-8 CAPLUS RN

CN

2-Pyridinecarboxamide, N-[[1-[(7,8-dihydro-1H-[1,4]dioxino[2,3-e]benzimidazol-8-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

193197-50-1 CAPLUS RN

CN

3-Pyridinecarboxamide, N-[[1-[(7,8-dihydro-1H-[1,4]dioxino[2,3-e]benzimidazol-8-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 193197-51-2 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(7,8-dihydro-1H-[1,4]dioxino[2,3-e]benzimidazol-8-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

ANSWER 18 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN L6

1997:204149 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 126:199573

Heterocyclylcarboxamide derivatives for use as TITLE:

neurotransmitter agonists

Birch, Alan Martin; Heal, David John; Kerrigan, Frank; Martin, Keith Frank; Needham, Patricia Lesley; INVENTOR(S):

Sargent, Bruce Jeremy

Knoll Aktiengesellschaft, Germany PATENT ASSIGNEE(S):

PCT Int. Appl., 93 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPL	CAT	ION I	DATE							
WO 9703071				A1 1		19970130			WO 1996-EP2890					19960702			
W:	AU,	BG,	BR,	CA,	CN,	CZ,	GE,	HU,	IL,	JP,	KR,	LV,	MX,	NO,	NZ,	PL,	
	RO,	RU,	SG,	SI,	SK,	TR,	UA,	US,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM

RW: AT,	BE, CH,	DE, DK	, ES, FI,	FR, GB, GR, IE, IT,	LU, N	MC, NL, PT, SE			
CA 2223472		AA	19970130	CA 1996-2223472		19960702			
AU 9665172		A1	19970210	AU 1996-65172	19960702				
AU 708890		B2	19990812						
EP 839145		A1	19980506	EP 1996-924847	19960702				
EP 839145		B1	20031105						
R: AT,	BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU,	NL, S	SE, PT, IE,			
	LV, FI		•						
CN 1190967	•	Α	19980819	CN 1996-195477		19960702			
CN 1071755		В	20010926						
BR 9609506		Α	19990601	BR 1996-9506		19960702			
JP 11508599		T2	19990727	JP 1996-505471		19960702			
RU 2169147		C2	20010620	RU 1998-102441		19960702			
IL 122540		A1	20011031	IL 1996-122540		19960702			
AT 253573		E	20031115	AT 1996-924847		19960702			
ZA 9605921		Α	19980112	ZA 1996-5921		19960712			
TW 454006		В	20010911	TW 1996-85115692		19961219			
US 5935973		Α	19990810	US 1998-981671		19980105			
NO 9800129		Α	19980112	NO 1998-129		19980112			
PRIORITY APPLN. I	NFO.:			GB 1995-14380	Α	19950713			
				WO 1996-EP2890	W	19960702			
OTHER SOURCE(S):		МАРРАТ	126:1995	73					

OTHER SOURCE(S):

MARPAT 126:199573

GΙ

$$\begin{array}{c|c} C1 & CH_2N & CH_2NHCO \\ & & & \\ O & & & \\ \end{array}$$

II

AB Title compds. I [A, B = CH2, O; R1 = optional substituent(s); R2-R4 = H, (un) substituted alkyl; U = (un) branched alkylene; Q = N-containing divalent group; T = heterocyclylcarbonyl attached to N in Q] were prepared for use in treating central nervous system disorders. Thus, the benzodioxane II was prepared from 5-chloro-2-hydroxybenzaldehyde, (R)-glycidyl tosylate, and 4-aminomethylpiperidine in 8 steps. II had a Ki for 5 HTl α receptor binding of 41.5 nM and also bound to the α 2D, D2, and α 1 receptors.

Ι

IT 187542-74-1P 187542-75-2P 187542-76-3P 187542-78-5P 187542-79-6P 187542-80-9P 187542-81-0P 187542-82-1P 187542-83-2P 187542-84-3P 187542-85-4P 187542-86-5P 187542-87-6P 187542-89-8P 187542-90-1P 187542-91-2P 187542-92-3P 187542-95-6P 187542-96-7P 187542-97-8P 187542-98-9P 187543-01-7P 187543-02-8P 187543-03-9P 187543-04-0P

187543-07-3P 187543-08-4P 187543-09-5P 187543-10-8P 187543-11-9P 187543-12-0P 187543-13-1P 187543-14-2P 187543-15-3P 187543-16-4P 187543-17-5P 187543-18-6P 187543-19-7P 187543-20-0P 187543-21-1P 187543-22-2P 187543-23-3P 187543-24-4P 187543-25-5P 187543-26-6P 187543-27-7P 187543-28-8P 187543-30-2P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzodioxanylmethylpiperidinylmethylcarbamoylpyridines as neurotransmitter agonists) 187542-74-1 CAPLUS 3-Pyridinecarboxamide, 2-amino-N-[[1-[(7-chloro-2,3-dihydro-1,4-

RN

CN benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

187542-75-2 CAPLUS RN

3-Pyridinecarboxamide, 2-amino-N-[[1-[(8-chloro-2,3-dihydro-1,4-CN benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

187542-76-3 CAPLUS RN

3-Pyridinecarboxamide, 2-amino-N-[[1-[(8-fluoro-2,3-dihydro-1,4-CN benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-78-5 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (2Z)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 187542-77-4 CMF C21 H26 N4 O3

$$\begin{array}{c|c} O & NH_2 \\ \hline \\ O & CH_2 - NH - C \end{array}$$

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

RN 187542-79-6 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-7-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-80-9 CAPLUS

CN 2-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-

piperidinyl] methyl] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ \hline \\ CH_2 - NH - C & \\ \hline \\ N & \\ \end{array}$$

RN 187542-81-0 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-82-1 CAPLUS

CN 8-Quinolinecarboxamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$CH_2-NH-C=0$$

RN 187542-83-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(8-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-84-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \hline \\ & & \\ \end{array}$$

RN 187542-85-4 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

OMe
$$CH_2 - NH - C$$
 NH_2 N

RN 187542-86-5 CAPLUS

CN 2-Pyridinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 187542-87-6 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187542-88-7 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-89-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-90-1 CAPLUS

CN 2-Thiophenecarboxamide, 3-amino-N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & & O \\ \hline O & & & & \\ \hline O & & & \\ \hline O & & & \\ \hline O & & \\ \hline CH_2 - NH - C & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O & & \\ \hline O & & \\ O$$

RN 187542-91-2 CAPLUS

CN 2-Thiophenecarboxamide, 3-amino-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

$$\begin{array}{c|c} C1 & & & \\ & S & & \\ & & N & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 187542-92-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-95-6 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[[2,3-dihydro-8-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-96-7 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-97-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-98-9 CAPLUS

CN 8-Quinolinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187542-99-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(8-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187543-01-7 CAPLUS

CN 2-Pyridinecarboxamide, N-[[1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-5-methyl-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 187543-00-6 CMF C22 H26 Cl N3 O3

Absolute stereochemistry. Rotation (-).

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 187543-02-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-methoxy-, hydrochloride (5:3), (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●3/5 HCl

RN 187543-03-9 CAPLUS

CN 3-Pyridinecarboxamide, 2-amino-N-[[1-[(7,8-difluoro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187543-04-0 CAPLUS

CN Methanesulfonic acid, trifluoro-, 3-[[4-[[[(2-amino-3-pyridinyl)carbonyl]amino]methyl]-1-piperidinyl]methyl]-2,3-dihydro-1,4-benzodioxin-5-yl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 187543-07-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-08-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-09-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-10-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(2,3-dihydro-7-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-(methylthio)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-11-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-bromo-N-[[1-[(2,3-dihydro-7-methyl-1,4-

Page 246

benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-12-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-13-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-14-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

RN 187543-15-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-(methylthio)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-16-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-bromo-N-[[1-[(7-bromo-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-17-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-18-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-(methylthio)-, (S)- (9CI) (CA INDEX NAME)

RN 187543-19-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-bromo-N-[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-20-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-21-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(7-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-(methylthio)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-22-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[[2,3-dihydro-8-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

187543-23-3 CAPLUS RN

3-Pyridinecarboxamide, N-[[1-[[2,3-dihydro-8-(trifluoromethyl)-1,4-CNbenzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

187543-24-4 CAPLUS RN

3-Pyridinecarboxamide, N-[[1-[[2,3-dihydro-8-(trifluoromethyl)-1,4-CN benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-6-(1H-pyrrol-1-yl)-, (S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

187543-25-5 CAPLUS RN

3-Pyridinecarboxamide, N-[[1-[[2,3-dihydro-8-(trifluoromethyl)-1,4-CN benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-2-(methylthio)-, (S)- (9CI) (CA INDEX NAME)

RN 187543-26-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-bromo-N-[[1-[[2,3-dihydro-8-(trifluoromethyl)-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-27-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(8-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-6-(1H-pyrrol-1-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187543-28-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[[1-[(8-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-2-(methylthio)-, (S)- (9CI) (CA INDEX NAME)

187543-30-2 CAPLUS RN

3-Pyridinecarboxamide, 5-bromo-N-[[1-[(8-chloro-2,3-dihydro-1,4-CNbenzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

187543-41-5P 187543-43-7P 187543-66-4P IT 187543-67-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzodioxanylmethylpiperidinylmethylcarbamoylpyridines as neurotransmitter agonists)

187543-41-5 CAPLUS RN

Phenol, 4-bromo-2-[[[[1-[(7-chloro-2,3-dihydro-1,4-benzodioxin-2-CN yl)methyl]-4-piperidinyl]methyl]imino]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

187543-43-7 CAPLUS RN

4-Piperidinemethanamine, 1-[[(2S)-7-chloro-2,3-dihydro-1,4-benzodioxin-2-CN yl]methyl] - (9CI) (CA INDEX NAME)

RN 187543-66-4 CAPLUS

CN 4-Piperidinemethanamine, 1-[(8-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-(phenylmethylene)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 187543-67-5 CAPLUS

CN 4-Piperidinemethanamine, 1-[(8-chloro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 19 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:921838 CAPLUS

DOCUMENT NUMBER: 123:340154

TITLE: Preparation of aromatic bicyclic heterocyclic

compounds as serotoninergic and dopaminergic receptor

antagonists

INVENTOR(S): Kerrigan, Frank; Heal, David John; Martin, Keith Frank

PATENT ASSIGNEE(S): Boots Co. PLC, UK

SOURCE: PCT Int. Appl., 103 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Facence English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DAT			APPLICATION NO.							DATE			
						-								-	-		
WO 9507274			A1	A1 19950316				WO 1994-EP2904						19940901			
	W:	AM,	AT,	AU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	ES,	FI,
																MD,	
		MN,	MW,	NL,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SI,	SK,	TJ,	TT,	UA,
		US,															
	RW:	ΚE,	MW,	SD,	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,

	NL,	PT, S	SE, BF,	BJ, CF, CG,	CI, CM, GA, GN, ML,	MR,	NE, SN, TD, TG
IN	179168		Α		IN 1994-MA843		
CA	2170056		AA	19950316	CA 1994-2170056		19940901
AU	9476928		A1		AU 1994-76928		
AU	689802		В2	19980409			
EP	717739		A1	19960626	EP 1994-927531		19940901
EP	717739		B1	20000329			
	R: AT,	BE, C	H, DE,	DK, ES, FR,	GB, GR, IE, IT, LI,	LU,	NL, PT, SE
CN	1133043		Α		CN 1994-193808		
CN	1052723		В	20000524			
BR	9407413		Α		BR 1994-7413		
JP	09502431		T2	19970311	JP 1994-508440		19940901
HU	75875		A2				19940901
RU	2136680		C1	19990910	RU 1996-113203		19940901
\mathtt{PL}	178270		B1	20000331	PL 1994-313347		19940901
AT	191214		E	20000415	AT 1994-927531		19940901
ES	2144528		Т3				
PT	717739		T		PT 1994-927531		19940901
RO	116811		B1	20010629			
IL	110844		A1	19991028	IL 1994-110844		19940902
ZA	9406798		A				
BG	63272		B1	20010831	BG 1996-100388		19960229
FI	9601016		Α	19960305	FI 1996-1016		19960305
NO	9600888		Α	19960305	NO 1996-888		19960305
NO	308536		B1	20000925			
US	5767116						
GR	3033575		Т3	20000929			
PRIORITY	APPLN.	INFO.:			GB 1993-18431		
					WO 1994-EP2904	W	19940901

MARPAT 123:340154

$$R_g^1$$
 A
 R_g^2
 B
 R_g^3
 R_g^4
 R_g^3

OTHER SOURCE(S):

GI

RN

The title compds. [I; A, B = CH2, O; Q = N-containing (un) substituted bridging group; R1 = halogen, (un) substituted alkyl, alkoxy, alkylthio, OH, acyloxy, CN, alkoxycarbonyl, (un) substituted carbamoyl, etc.; R2 = alkyl, alkoxy; R3, R4 = H, alkyl; T = (un) substituted N-containing heteroaryl, benzofuranyl, benzodioxanyl; U = (un) substituted alkylene; g = 0-4], useful as serotoninergic, adrenergic, and dopaminergic receptor antagonists, are prepared and I-containing formulations presented. Thus, N-(1,4-benzodioxan-2-ylmethyl)-1-[1-(3-chloropyrid-2-yl)piperid-4-yl]methylamine 1.4 hydrochloride, m.p. 251-253°, was prepared from 2,3-dichloropyridine and demonstrated a Ki of 1.9 nM against rat brain-derived 5-HT1A receptors.

IT 170352-81-5

170352-81-5
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (claimed compound; preparation of aromatic bicyclic heterocyclic compds. as serotoninergic and adrenergic and dopaminergic receptor antagonists)
170352-81-5 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

IT 170352-82-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aromatic bicyclic heterocyclic compds. as serotoninergic and adrenergic and dopaminergic receptor antagonists)

RN 170352-82-6 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-N-(2-methoxyphenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 170352-81-5 CMF C22 H28 N2 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

L6 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:213091 CAPLUS

DOCUMENT NUMBER: 118:213091

TITLE: Preparation of piperidinylmethylbenzodioxanes as

central nervous system agents

INVENTOR(S): Stack, Gary P.

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE: U.S., 7 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 5182292	Α	19930126	US 1991-719886	19910621		
US 5212170	Α	19930518	US 1992-882405	19920513		
US 5221745	Α	19930622	US 1992-882200	19920513		
PRIORITY APPLN. INFO.:			US 1991-719886 A	3 19910621		
OTUED COIDCE(C).	маррат	118.213001				

OTHER SOURCE(S): MARPAT 118:213091

$$ZCONR^1 (CH_2)_n$$
 $(CH_2)_m$
 NCH_2
 R^2

$$Q^4 =$$
 So_2 $Q^5 =$ $Q^6 =$

AB Title compds. [I; Z = Me2R4C, Q1, Q2, Q3; ZR1 = Q4-Q6, etc.; R4 = H, alkyl; q = 0-2; Y = H2, O; R1 = H, alkyl; R2, R3 = H, alkyl, alkoxy, alkoxy, alkanoyloxy, OH, halo, (di) (alkyl) amino, alkanamido, sulfonamido; R2R3 = OCH2O; OCH2CH2O, OCH2CH2CH2O; m = 1-3; n = 0, 1], were prepared Thus, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl) methyl]-4-aminomethylpiperidine and decahydro-1,5-methano-6,7,9-methanopentaleno[1,2-d]oxopine-2,4(1H,5H)-dione were refluxed in xylene with azeotropic removal of H2O to give 3-[[1-[2,3-dihydro-1,4-benzodioxin-2-yl) methyl]-4-piperidinyl]methyl]decahydro-2H-1,5-methano-6,7,9-methanopentaleno[1,2-d]azepine-2,4-(3H)-dione. This at 1 μM gave 97% inhibition of 3H-spiroperidol binding to D2 receptors in limbic brain tissue prepns., and at 0.1 μM gave 96% inhibition of 3H-dipropylaminotetralin binding to 5HT1A receptors.

IT 147181-38-2P 147181-39-3P 147196-89-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as dopamine and serotonin receptor ligand)

RN 147181-38-2 CAPLUS

CN Tricyclo[3.3.1.13,7]decane-1-carboxamide, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2 - NH - C \\ \hline \\ O & CH_2 - NH - C \\ \hline \end{array}$$

● HCl

1,5-Methano-6,7,9-metheno-1H-pentaleno[1,2-d]azepine-2,4(3H,5H)-dione, CN 3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]octahydro-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

147196-89-2 CAPLUS RN

Tricyclo[3.3.1.13,7]decane-1-carboxamide, N-[[1-[(2,3-dihydro-1,4-CN benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

IT 89483-75-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of dopamine and serotonin receptor ligand)

RN 89483-75-0 CAPLUS

4-Piperidinemethanamine, 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-CN (CA INDEX NAME) (9CI)

CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1 ANSWER 21 OF 33

1991:464574 CAPLUS ACCESSION NUMBER:

115:64574 DOCUMENT NUMBER:

Effects of an alpha2 antagonist in a 20-year-old Java TITLE:

monkey with MPTP-induced Parkinsonian signs

Colpaert, F. C.; Degryse, A. D.; Van Craenendonck, H. AUTHOR (S):

Dep. Psychopharmacol., Janssen Pharm., Beerse, B-2340, CORPORATE SOURCE:

Belq.

Brain Research Bulletin (1991), 26(4), 627-31 SOURCE:

CODEN: BRBUDU; ISSN: 0361-9230

DOCUMENT TYPE: Journal English LANGUAGE:

The study attempted to verify whether activation of locus coeruleus AB neurons by alpha2 antagonists might improve parkinsonian signs. Treatment with the racemic alpha2 antagonist R 47 243 of a monkey with MPTP-induced parkinsonian signs normalized blink rate, reduced resting tremor, and

Page 257

improved several other parkinsonian signs. In a second experiment, the (-)-isomer R 62 651 produced a gradual change in tremor which was the inverse of the manner in which tremor had become installed as the result of progression earlier upon the MPTP challenge. It is proposed that further research be conducted to determine whether alpha2 antagonists may beneficially influence the progression of Parkinson's disease.

IT 104383-18-8, R 47243 104383-19-9, R 62651

RL: BIOL (Biological study)

(Parkinsonism from MPTP response to, α2-adrenergic receptors in)

RN 104383-18-8 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

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RN 104383-19-9 CAPLUS

CN 2-Benzothiazolamine, N-[[1-[[(2S)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 22 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:515318 CAPLUS

DOCUMENT NUMBER: 113:115318

TITLE: Preparation of benzodioxan-2-ylalkylamines and analogs

as agrochemical fungicides

INVENTOR(S): Selby, Thomas Paul

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT :	NO.			KIN	D	DATE		1	APPL	ICAT	ION	NO.		Dž	ATE	
							-					- -			-			
WO 9002122				A1 19900308		WO 1989-US3436					19890815							
		₩:	AU, SU,	•	BG,	BR,	DK,	FI,	HU,	JP,	KR,	LK,	MC,	MG,	MW,	NO,	RO,	SD,
		RW:	-	-	-	BJ, TD,		CG,	CH,	CM,	DE,	FR,	GA,	GB,	IT,	LU,	ML,	MR,
	EΡ	3594	00			A1		1990	0321]	EP 1	989-	3082	46		19	9890	815

R: ES, GR				
AU 8942025	A1	19900323	AU 1989-42025	19890815
EP 429535	A1	19910605	EP 1989-910036	19890815
R: DE, FR, GB,	IT			
JP 04500075	T2	19920109	JP 1989-509540	19890815
CN 1040371	Α	19900314	CN 1989-106494	19890816
ZA 8906254	Α	19910424	ZA 1989-6254	19890816
PRIORITY APPLN. INFO.:			US 1988-232682	A2 19880816
			WO 1989-US3436	A 19890815

OTHER SOURCE(S):

MARPAT 113:115318

GI

The title compds. [I; R1, R2 = H, halo, alkoxy, substituted Ph, (un) substituted alkyl, etc.; R3-R5 = H, Me, Et, CF3; R6, R7 = alkyl; NR6R7 = (un) substituted heterocyclyl; X, Y = O, S; Z = alkylene; m = 0, 1] were prepared Thus, 4-tert-butylcatechol was refluxed 2 h with BrCH2CH:CHCO2Et in MeCN containing K2CO3 to give benzodioxanylacetates II (R1 = Me3C and R2 = H, R1 = H and R2 = Me3C) (III; R = CO2Et) which was converted in 2 steps to III (R = COCl). The latter was stirred 1 h with piperidine in THF and the product reduced with LiAlH4 to give III (R = piperidinomethyl). III.HCl (R = cis-3,5-dimethylpiperidinomethyl) gave 47-100% control of 6 fungi, e.g., 77% control of Phytophthora infestans on tomato seedlings, when sprayed at 200 ppm.

IT 129018-87-7P 129019-07-4P 129019-21-2P 129019-42-7P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as agrochem. fungicide)

RN 129018-87-7 CAPLUS

CN Piperidine, 1-[[6-(1,1-dimethylethyl)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 129019-07-4 CAPLUS

CN Piperidine, 1-[[6-(1,1-dimethylethyl)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-methyl- (9CI) (CA INDEX NAME)

RN 129019-21-2 CAPLUS

CN Piperidine, 1-[[7-(1,1-dimethylethyl)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 129019-42-7 CAPLUS

CN Piperidine, 1-[[7-(1,1-dimethylethyl)-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-3-methyl- (9CI) (CA INDEX NAME)

L6 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:549544 CAPLUS

DOCUMENT NUMBER: 109:149544

TITLE: Preparation of N-substituted [(4-

piperidylalkyl)amino]triazoles and -oxadiazoles as

antihypertensives

INVENTOR(S): Cornu, Pierre Jean; Perrin, Claude; Dumaitre, Bernard;

Streichenberger, Gilles

PATENT ASSIGNEE(S): Bouchara S. A., Fr.

SOURCE: Can., 42 pp.
CODEN: CAXXA4

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
CA 1231950 PRIORITY APPLN. INFO.:	A1	19880126	CA 1983-433207 FR 1983-13010	Δ	19830726 19820726
OTHER SOURCE(S):	Маррат	109:149544	FR 1963-13010	A	17020720
GI	PIMICEAT	107.147544			

The title compds. [I; Ar = pyridyl, oxazolyl, pyrazolyl, (un) substituted Ph, benzodioxanyl, indolyl; Q = Ql, Q2; R3 = H, alkyl, aryl, aralkyl; X = (CH2)m, CO(CH2)q, CH(OH)(CH2)q, C(OR1)(OR2)(CH2)q; R1, R2 = alkyl; R1R2 = alkylene; Z = NH, NR3, O; m = 1-4; n = 0-2; q = 1-3] were prepared 1-(1,4-Benzodioxan-2-ylethyl)-4-(aminomethyl)piperidine and (MeS)2C:NCN were refluxed 4 h in EtOH to give I [Ar = 1,4-benzodioxan-4-yl, Q = C(:NCN)SMe, X = CH2CH2, n = 1]. Similarly prepared I (Ar, Q, n as above, X = CH2) was refluxed 4 h in EtOH with hydrazine hydrate to give I (Ar = 1,4-benzodioxan-4-yl, Q = Q1, R3 = H, n = 1) (II). Tablets were prepared containing II 50, starch 620, cellulose 375, CaSO4 510, CM-cellulose 20, and ethylcellulose 15 g per 104. A marked hypotensive effect was produced in anesthetized rats and dogs at 2-10 and 20-50 μg/kg i.v. by most active I and other I, resp.

IT 89483-82-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antihypertensives)

RN 89483-82-9 CAPLUS

CN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

SMe
$$CH_2-N=C-NH-CN$$

$$CH_2-N=C-NH-CN$$

IT 90618-24-9P 90618-29-4P 90618-30-7P 90618-31-8P 90618-34-1P 116732-11-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antihypertensive)

RN 90618-24-9 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-NH & \stackrel{H}{N} & NH_2 \\ \hline \\ N-N & N-N \\ \end{array}$$

RN 90618-29-4 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N-[[1-[(2,3-dihydro-6-methyl-1,4-

Page 261

benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$CH_2-NH \longrightarrow NH_2$$

$$N-N$$

RN 90618-30-7 CAPLUS

CN 1,2,4-Oxadiazole-3,5-diamine, N3-[[1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
CH_2-NH & NH_2\\
N-O & NH_2
\end{array}$$

RN 90618-31-8 CAPLUS

CN 1,2,4-Oxadiazole-3,5-diamine, N3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2 - NH & NH_2 \\ \hline \\ O & CH_2 - N \\ \hline \end{array}$$

RN 90618-34-1 CAPLUS

CN 1H-1,2,4-Triazole-3,5-diamine, N3-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-methyl- (9CI) (CA INDEX NAME)

RN 116732-11-7 CAPLUS

CN 4H-1,2,4-Triazole-3,5-diamine, N-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

IT 89483-76-1 89483-81-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of antihypertensives)

RN 89483-76-1 CAPLUS

CN Carbamimidothioic acid, N-cyano-N'-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

$$CH_2-N=C-NH-CN$$

$$CH_2-N=C-NH-CN$$

RN 89483-81-8 CAPLUS

CN 4-Piperidinemethanamine, 1-[(2,3-dihydro-6-methyl-1,4-benzodioxin-2-yl)methyl]- (9CI) (CA INDEX NAME)

$$CH_2-NH_2$$

L6 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:437821 CAPLUS

DOCUMENT NUMBER: 109:37821

TITLE: Preparation of 4-[(bicyclic

heterocyclyl) methyl] piperidines and analogs as

antihistaminics

INVENTOR(S): Janssens, Frans E.; Kennis, Ludo E. J.; Hens, Jozef

F.; Torremans, Joseph L. G.; Diels, Gaston S. M.

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: U.S., 59 pp. Cont.-in-part of U.S. Ser. No. 571,135,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: Eng FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4695575	A	19870922	US 1985-747754	19850624
ES 539281	A1	19870616	ES 1984-539281	19841231
AU 8537364	A1	19850912	AU 1985-37364	19850107
AU 573673	B2	19880616		
CA 1259609	A1	19890919	CA 1985-471589	19850107
DK 8500089	Α	19850710	DK 1985-89	19850108
FI 8500079	A	19850710	FI 1985-79	19850108
FI 83867	В	19910531		
FI 83867	C	19910910		
NO 8500085	A	19850710	NO 1985-85	19850108
NO 160849	В	19890227		
NO 160849	С	19890607		
JP 60185777	A2	19850921	JP 1985-479	19850108
JP 07068240	B4	19950726		

нU	36471		A2	19850930	HU	1985-61		19850108
HU	200338		В	19900528				
ZA	8500187		Α	19860827	ZA	1985-187		19850108
RO	90622		B3	19861210	RO	1985-117252		19850108
SU	1396964		A3	19880515	SU	1985-3836858		19850108
IL	74018		A1	19880831	IL	1985-74018		19850108
PL	145710		B1	19881031	PL	1985-251488		19850109
US	4839374		Α	19890613	US	1987-94987		19870910
PRIORITY	Y APPLN.	INFO.:			US	1984-569369	A2	19840109
					US	1984-671135	A2	19841113
					US	1985-747754	A3	19850624

OTHER SOURCE(S):

CASREACT 109:37821

GI

$$R^2$$
 R^1
 A^1
 A^2
 A^3
 A^4
 A^3
 A^4
 A^3
 A^4
 A^4

The title compds. [I; 3 of A1-A4 = (un)substituted CH, the 4th = N, (un)substituted CH; B = CH2, O, SO, SO2; R = substituted C1-6 alkyl, alkoxy, alkylthio, amino, pyrrolidinyl, piperidinyl, hexahydroazepinyl, etc.; R1 = H, alkyl, cycloalkyl, (un)substituted aryl, heteroaryl, (hetero)aralkyl; R2 = H, alkyl] and their stereoisomers and acid salts were prepared as antihistaminics and serotonin antagonists.

1-[(4-Fluorophenyl)methyl]-2-(4-piperidinylmethyl)-1H-benzimidazol-5-ol and PhSCH2CH2Br were refluxed 2 h in Me2CHCH2COMe containing Na2CO3 to give 27.8% benzimidazole derivative (II). I inhibited compound 48/80-induced lethality in rats, caused by histamine release, with ED50 of 0.005-0.16 mg/kg s.c. or orally. I also inhibited gastric lesions caused by simultaneous release of serotonin.

IT 99953-86-3P 99953-90-9P 99953-94-3P 99953-96-5P 99953-98-7P 99963-45-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antihistaminic)

RN 99953-86-3 CAPLUS

CN 1H-Benzimidazole, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-(phenylmethyl)-, ethanedioate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 99953-85-2 CMF C29 H31 N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 99953-90-9 CAPLUS

CN 1H-Benzimidazole, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-1-[(4-fluorophenyl)methyl]-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 99953-89-6 CMF C29 H30 F N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 99953-94-3 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-(2-thienylmethyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 99953-93-2 CMF C26 H28 N4 O2 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 99953-96-5 CAPLUS
CN 1H-Benzimidazole, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4piperidinyl]methyl]-1-[(4-methylphenyl)methyl]-, (2E)-2-butenedioate (2:3)
(9CI) (CA INDEX NAME)

CM 1

CRN 99953-95-4 CMF C30 H33 N3 O2

$$\begin{array}{c|c}
 & \text{CH}_2 \\
 & \text{N} - \text{CH}_2
\end{array}$$
Me

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

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RN 99953-98-7 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-(2-pyridinylmethyl)-, ethanedioate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 99953-97-6 CMF C27 H29 N5 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 99963-45-8 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 2-[[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-4-piperidinyl]methyl]-3-[(4-fluorophenyl)methyl]-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

CM I

CRN 99963-44-7 CMF C28 H29 F N4 O2

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

=>

=> log y COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 192.87 371.33 FULL ESTIMATED COST SINCE FILE TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

ENTRY SESSION -24.75 -24.75 CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 11:15:56 ON 03 JAN 2006